DOCUMENT RESUME

ED 129 403 PS 008 722

AUTHOR	Quillian, Benjamin F., Jr.; Rogers, Kathryn S.
TITLE	Nine Model Programs for Young Children: Appendix of Supplementary Materials. Volume II.
INSTITUTION	National Coordination Center for Early Childhood Education, St. Ann, Mo.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	72
NOTE	137p.; For Volume I, see PS 008 721
EDRS PRICE	MF-$0.83 HC-$7.35 Plus Postage.
DESCRIPTORS	Bilingual Education; *Bilingual Students; Cognitive Development; *Disadvantaged Youth; *Early Childhood Education; *Instructional Materials; Intervention; Language Development; Lesson Plans; Open Education; Parent Participation; *Preschool Children; Preschool Curriculum; *Preschool Programs; *Program Descriptions; Reading Instruction; Sensory Training; Social Development; Spanish Speaking
IDENTIFIERS	Bilingual Early Childhood Program; DARCEE; Demonstration and Research Center Early Education; Florida Parent Education Model; Piaget (Jean); Primary Education Project; Project Follow Through; Responsive Model Program; Tucson Early Education Model

ABSTRACT

This appendix to the National Program on Early Childhood Education (NPECE) Survey contains materials intended to provide additional information about six of the nine programs described in the survey. The materials include: (1) narrative descriptions of cooking and reading experiences for the Tucson Early Education Model; (2) information on curriculum, staff development and scheduling for the Bilingual Early Education Program (SEDL); (3) information on curriculum, scheduling, home visitation, evaluation and other aspects of the DARCEE/NPECE Preschool Program; (4) a list of problem-solving processes related to the objectives of the Responsive Model Program; (5) a sample curriculum sequence and an outline of skills for the Primary Education Project; and (6) information on curriculum and data collection instruments for the Florida Parent Education Model. (MS)

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appendix

9
model programs for young children

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NINE MODEL PROGRAMS FOR YOUNG CHILDREN:

APPENDIX OF SUPPLEMENTARY MATERIALS

VOLUME II

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St. Louis, Missouri

PS 008722

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04152-N-62-R-54

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V. Nelson, B. Richards, & L. Rodriguez, *Orchestrated Instruction: A Cooking Experience*, mimeograph, Arizona Center for Early Childhood Education, August 1969.

A. Hobson, *Reading in an Orchestrated Second Grade*, mimeograph, Arizona Center for Early Childhood Education, August 1969.

ORCHESTRATED INSTRUCTION: A COOKING EXPERIENCE

It was thirty minutes before the regular school day at Ochoa Elementary School would begin, but many of the boys and girls in Mrs. Richards' third grade class were already involved in the planning and preparation for the day's activities.

As they entered the door of the classroom, they met "face-to-face" with a new yellow, teacher-made and illustrated storybook. It hung from the middle of the door frame on a string and said:

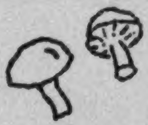
Hello!
Today you
lucky kiddos
1

are going to
COMBINE
2

celery,
meat,
potatoes,
onions,
carrots,
bell pepper
3

plus H_2O
(water)
Tomato sauce
4

A
N
D
5


6

into a tasty
delicious
flavorful
STEW!
7

Several children read the book aloud as they entered and others gathered around, listening intently. Two of the children who were listening hurried to get a friend so that he might hear it also.

From the door the children moved quickly to the interest centers within the room talking in questioning and excited voices. They were recalling what the book on the door had said as well as the plans they had made with their teacher and the aide on the previous day. Yes it was certainly true! Today was the day they were going to make stew!

On this particular day three of the five interest centers within the room had been designated as cooking centers. At one center the children found a hot-plate, an electric frying pan, a package labeled "stewing beef", flour, shortening and seasonings. Near this center, written on a large sheet of paper, was the recipe for making stew. Two girls moved in closer to read the recipe, one supplying the words for the other when it was necessary.

At another cooking center the children were speculating about the names of and uses for the items they found. There were potato peelers, knives, potatoes, onions and a cutting board. They picked up the items for more careful examination in their effort to identify them.

The array at the third cooking center was equally interesting. Here the children found the carrots, a bell pepper and celery along with the necessary utensils for the preparation of the vegetables--knives, peelers, and a cutting board.

As the children moved from center to center talking and manipulating the items they saw, Mrs. Richards also moved from center to center asking and answering questions in an effort to help the children extend their language and knowledge. She helped by supplying labels for the things not familiar to some children and directed comments many times to specific individuals in a way that was illustrative of language extension and elaboration. She was consciously modeling language for all to hear. One particularly good example of this was evident when Carmen said: "Oh, I know what that is," - (picking up the potato peeler) - "it's like what my mother uses at home--like this," making an up and down motion with her hand.

Mrs. Richards replied, "Yes, Carmen, you're right. It's called a potato peeler. Your mother probably uses it to peel potatoes and other vegetables as she prepares them for you to eat."

At this point the aide moved in quietly and asked three children to go with her to the cafeteria for the large stew pan that would be needed later.

As they left the room, the program assistant also took a committee of five children and drove to a large super-market in the immediate neighborhood to purchase the last of the necessary ingredients for the stew--two cartons of frozen lima beans. Attention was directed and given to the many different brands of lima beans, the cost of each brand and the weight printed on each carton. The children also located the dried beans and canned beans and talked about the different ways they had seen them prepared in their homes.

One child in the group was given a dollar in change and with the help of his friends counted out the correct amount for the purchase, and happily paid the cashier. He carefully kept the sales slip and gift stamps for later use in the classroom.

On a previous day, another committee of children had also had an opportunity for a similar experience when they went to buy carrots. Such activities provide a greater involvement for all the children in the total organization and planning of an outcome in which they ultimately participate.

The other ingredients used in making the stew were purchased by the school with special funds allocated for this purpose. This slip was also kept for the children to use in later activities relating to their cooking experience.

Shortly after nine o'clock the children began to gather on the large oval rug in the room. Near the rug, Mrs. Richards had displayed a second copy of the stew recipe. This copy was later to be placed so it could be seen from the two cooking centers where the children were to prepare the vegetables.

After an informal discussion and sharing time, the recipe was read by several children to the total group and specific planning and directions for the morning's structured time began. Committee chairmen moved with their respective committee members to the centers specified by the teacher on her planning board.

The children at two centers, writing and independent reading, were not immediately involved in the cooking activities but they worked independently as they knew from previous planning and experiences that they would participate later as the committee rotated and changed activities.

According to previous planning, Mrs. Richards, her aide and the program assistant began their work with the children, each at a different cooking center. Five children were at each center and all were engaged in coversation about the particular items at their center. Their attention was drawn to the recipe and they read it carefully, first noting the ingredients and the method of preparation. There was much verbal speculation and calculation concerning what their specific preparation of ingredients would contribute to the end product, the stew. This was a time when the many intellectual skills within each child were evident; e.g. observing, comparing and contrasting differences in ingredients, observations of sizes and shape of some of the vegetables in relationship to others and acquisition of labels for materials new to the children. It was also a time for the adults to be aware of attitudes such as frustrations, sharing, and success.

The committees worked approximately forty minutes before rotating. After the rotation the children worked for another forty minutes. By this time all the children had taken part in the preparation of the ingredients for the stew and had taken bites of the raw vegetables. They cleaned the various cooking centers, washing the utensils carefully, and moved to the area of the room near the stew pan and hot-plate where several children added the prepared ingredients and other things, i.e. seasonings, canned tomatoes and mushrooms. Together they read the last direction listed under method in the recipe. It said, "Simmer several hours." Considering their work well done, they began to move outdoors for exercise and fresh air.

The stew simmered and bubbled gaily for the remainder of the school day under many watchful eyes including those of numerous teachers and students who followed their noses to the source of the tempting aroma. During the afternoon as the stew simmered the children continued to concentrate on their morning's efforts as they recalled their activities and dictated stories about the stew to the teacher and the program assistant.

At the end of the day the stew was placed in the refreigerator until "tasting time" the following day.

The stew-making experience was a highly motivating activity for the children and thus was the core of the curriculum in Mrs. Richards' classroom for several weeks.

The dictation given by the children to the teacher and program assistant, recalling their own involvement in the preparation of the stew was written and illustrated on ditto masters. The masters were reproduced and bound into individual books, complete with table of contents, stories, and activity pages, for each child. The following are sample pages:

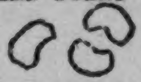
Johathan said, "I was peeling potatoes and when Tony was peeling the onions, they made me weep. Then I cut my finger."

my left hand
the middle
finger

Lina remembered exactly how we made the stew, "First we put 5 cups of water in the pan," she said. "Then we floured the meat. We put the meat in the frying pan. It got brown. We put the meat in the pan of water. It started to boil. The we put in pepper and salt. We put in lima beans. When we came back there were carrots in it. Next we put in bell pepper. We stirred it. We put in onions, too. And celery."

celery

Lima Beans



Please put these words in alphabetical order:

stew
potatoes
onions
celery
water
lima beans
pot
carrots
bell pepper
tomato sauce
salt
pepper
beef
flour
shortening
recipe

1.
2.
3.
4.
5.
6. etc.

Can you think of words that rhyme with stew?

1.
2.
3.
4. etc.

How we made stew.

First we read the r-----.

Victor diced the ---- ------, etc.

The books were then used as the basis of the structured reading lessons in the small committee work.

The invitation for children to write their own stories about the tasting of the stew was offered at the writing center. Mrs. Richards cut the writing paper into the shape of the stew pan. She later bound the pages, as the children had written and illustrated them, into an intriguing stew pan shape book. Copies of the individual storybooks along with the stew pan shape book were placed in the classroom library for free reading opportunities.

Further extension of the reading environment offered by the stew making experience was evident during the following weeks as the children, at the art center, busily painted a large mural with "bubbles of language," telling about the activities in their room on the day they made stew.

The opportunities for math from this experience were rich and a special math book was prepared for each child. The book was titled How to "Brew" Stew and consisted of five prepared pages and two blank pages. On one page was a copy of the stew recipe and on another was a price list for the cost of each ingredient in the stew. The activity pages were presented in a way that would involve the children in further recall, language sequence and extension; accurate mathematical computation through manipulation of real money and formulation of problems with abstract symbols; as well as answering open-ended questions. The two blank pages at the end of the book were to be used by each individual in any way he wished as an extension of his work. The following are sample pages from the math book:

Draw pictures to show the ingredients used in making the stew. Check the price list and record the cost of the ingredients.

beef onions lima beans

potatoes carrots celery

Name an ingredient you had never tasted before.________________

How much did it cost?__________

Name the ingredient you like best.________________________

How much did it cost?__________

Read this page.
The price list on page 4 will help you.

1. James and Johnny went to A.J. Bayless. They bought 1 package of celery and 1 bell pepper. How much did they spend?

celery ______
bell pepper______
Total cost ______

2. Sue and Porfhelia went to A.J. Bayless. They bought 6 potatoes and 1 can of mushrooms. How much did they spend?

potatoes _______
mushrooms _______
Total cost_______

Did you use real money to help you?

It was interesting to learn from Mrs. Richards that some of the children had not known how to carry in addition but as they formulated their own problems in this lesson they created a need for this mathematical skill and followed through by acquiring the ability to do it accurately and with understanding.

The invitation for reading, writing and greater mathematical skills were given specific attention in this cooking experience but there were also constant evidences of awarenesses and extended concept development in the content areas of science and social studies. The teacher, and her aide acknowledge the children's attention to change and relationships, and led them to further concept developments in ways that made these areas an interrelated part of the total stew-making activity. A record of language interaction confirms this:

> As the children watched the stew cook, Guillermo commented, "The steam goes up into the sky and turns into water and it rains." Several children reinforced his conclusion in affirmative ways.

Mrs. Richards asked, "I wonder what would happen to our stew if it cooked for many days?"

Sylvia replied, "It would dry up."

Lina added, "It evaporates."

Changes were noticed continuously as the stew was being prepared. Mario recalled, "I put some flour on the meat. I put the meat and the flour in a plastic bag and then shaked it. It got white."

Alfred remembered, "The meat got sticky on the pan."

Lina told us, "We put the meat in a frying pan. It got brown. We put the meat in a pan of water. It started to boil."

Mrs. Richards helped them to give further attention to change. She said, "Notice how much softer the vegetables are now after they have been cooked."

Many related books were checked out of the library to serve as resource materials and literary extensions. The children read Stone Soup by Marcia Brown and The Carrot Seed by Ruth Krauss. They also enjoyed Crunch Crunch by Ethel and Leonard Kessley and Up Above and

Down Below by Irma Webber. Betty Crocker's Dinner in a Dish Cook Book was used along with other recipe books and monthly magazines such as Family Circle and Sunset. They scanned many other magazines for colorful pictorial representations of their stew and its ingredients.

Discussion during the preparation of the vegetables revealed some knowledge and a great deal of interest in "how" as well as "where" the vegetables were grown. Quite possibly this interest could be extended at a later date by a trip to a green house or nursery. The children might even choose to plant a garden of their own at school.

Ideas generate ideas and in working with children in such activities as the structured stew making, it is readily apparent that an exciting, open-ended and flexible approach to learning motivates all who are involved to greater concepts learned from extended content and curriculum. It is called orchestrated learning because it reflects the operation of the four principle goals in the program. The activity of making stew simulatneously attended to the developing of language, intellectual, motivational and societal skills.

The old adage, "Too many cooks spoil the broth" could not be farther from the truth. Everyone said, "It tasted delicious."

READING IN AN ORCHESTRATED SECOND GRADE

Arline Hobson, Research Associate
Betty Hauser, Teacher

This quiet and non-effusive teacher who conducts her instruction with symphonic skill, brought the silkworm eggs out again from their yearly refrigerator refuge into a cardboard box generously lined with mulberry leaves. A chart that she had printed on a large mulberry-leaf shaped piece of green construction paper was fastened to the outside of the door. It read:

"There are eggs and mulberry leaves in the box. Can you guess what will hatch out?"

Children paused at the door, helping each other to read the chart, and then hustled into the room and to the table to examine the contents of the box. Doubts about the door chart's information were expressed:

e.g. I don't see no eggs.
I had eggs for breakfast.
Look at the sand stuff under the leaves.
Maybe they're eggs.
Not like eggs I eat.
Maybe Mrs. Hauser'll tell us.

Mrs. Hauser did tell, explaining that these were silkworm eggs from which tiny little crawling silkworms, not fluffy chicks would hatch.

Anticipation ran high for the children and their verbal speculation about the silkworms with continuous recourse to the teacher for further information provided use of several important intellectual skills well practiced in this classroom: specifically the practice of imagination, projection into the future, speculation, and conditionality. The value of learning and of using adult resources were intimately related.

And then the silkworms hatched!

Norman discovered the first little crawling larva and carried the message throughout the room. "They hatched! They hatched!"

The process was under child surveillance continuously thereafter and the class door opened easily and frequently to allow the supply of mulberry leaves to be gathered from a nearby tree.

The cessation of eating by some of the larvae aroused pupil concern and fear for their survival. Mrs. Hauser was reassuring, telling the children that the larvae were then ready to spin a cocoon and that they were searching for something on which to attach the silk threads with which they would wrap themselves.

"Don't you remember how they spun cocoons last year?" asked Mrs. Hauser, helping them to recall their first grade encounter with the silkworms and to retrieve some of the knowledge gained during the first experience. Such recall and retrieval, fragmentary and limited as it was, stimulated anticipation, and the children were frequently to be seen hovering over the larvae to witness the spinning.

As the silken threads became visible and the cocoons began to take shape, some children remembered that these same threads were used to weave silk cloth.

Weaving, cloth, and silk were concepts reflected over and over again in activities chosen by the children during their own choice time. Homemade cardboard looms were put to use, and "warp" and "woof" were comprehended.

Sensory pleasure was heightened by handling pieces of beautiful silk cloth, and conversations about the cloth increased the questioning behavior of the children as they attempted to understand the causal chain from the minute little eggs to the soft, smooth cloth of woven silk. The children acquired a reasonable understanding, as much but also as little understanding as can be conveyed by verbal transmission of information. Interest continued to mount when one of the small committee groups in the class corporately agreed on mounting the pieces of silk cloth on the bulletin board with a simple group story as follows:

> "This is silk cloth. Silk is made from thread taken from cocoons. Mrs. Hauser gave us this cloth."

They had seen cocoons being spun and now several stages of the metamorphosis were visible at one time. Some individual children asked to have cards for copying "silk" and "cocoon" for their own personal sets of word cards, fastened together with looseleaf rings and hung on the word card tree.

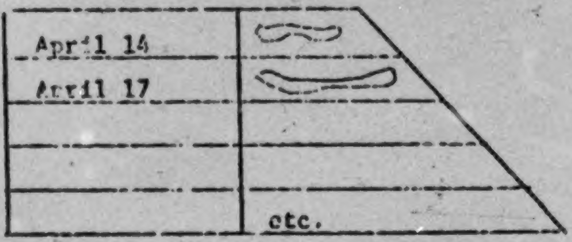
The children's intellectual awareness of cyclic change and of causality coupled with speculation rich in natural science content was further orchestrated with charting and measurement, both valuable societal skills, not to mention reading. Evidence of this is in their charting of silkworm change:

Silkworms

April 11 and 12:	Silkworms hatched
April 14:	Silkworms are 1/4 inch long
April 17:	Silkworms are 1/2 inch long
April 25:	Silkworms are 3/4 inch long
May 2:	Silkworms are 1 1/4 inches long
May 12:	Silkworms are 2 1/4 inches long
May 16:	Begin spinning cocoons

Norman, the discoverer of the hatching larvae was a highly emotional child who had been considered a candidate for a special class. Mrs. Hauser had insisted that he would profit by remaining in this heterogeneous group, believing that he had enthusiasm, vitality, and intellectual acuity that could contribute to the life of the class, and believing also that he could profit by good peer modeling of desirable social behavior. Norman's occasional wild tantrums were increasingly coming under his own control. He had learned to go out of the classroom and under a nearby tree when an impulse to rage sometimes possessed him. These rare and rarer times were counterbalanced by his intense involvement in learning. His participation and high interest in the silkworm experience was at a peer leadership level. Not fully satisfied with the above chart, he had contructed a table as follows:

Silkworms



This child, whom so many would prefer to set aside in a world of separateness because of his erratic, exaggerated behavior, had added meaning to the charting activity for the whole group. He had experienced a real sense of worth for inventing, by himself, a new chart (he did need help in the measurement), and he discovered again in this orchestrated situation that he was considered to be and respected as a good learner.

On May 16 the worms began spining cocoons, and two days later, on May 18, Apollo 10 blasted off. The latter event initiated another focus of orchestrated activity running concurrently and parallel to the silkworm process. In small group discussions, the teacher continued to share her knowledge about both silkworms and space exploration and thus, to extend the children's knowledge of several aspects of their world. The various children in a class committee commented about the silkworms as follows:

> They eat mulberry leaves.
> They spin cocoons.
> They hatch from eggs.
> The females laid eggs.
> The mothers will die.

Mrs. Hauser copied these discussion comments on sentence strips, which she placed along the board ledge, reminding the children that these sentences had been expressed by them and were factual. After a search by each child to identify which of the five sentences was his own, each one made a personal book, copying whatever sentences he chose. In some cases the child modified the sentences, i.e., They spin cocoons after they eat the mulberry leaves." Each sentence was illustrated and the books were bound and placed on the class reading table to be pursued over and over again by all members of the class.

In the meantime, samples of the many art projects relevant to the silkworm process were selected by the various small groups to illustrate a teacher-child bulletin board entitled The Circle of Life.

Norman was always most eager to take a visitor by the hand to the bulletin board, to read the mural to him, and to show him a specific silkworm stage at the silkworm box. At times he would leave his guest temporarily to race outdoors for a fresh mulberry leaf.

On June 2, a few fluttering moths, a generous sprinkling of eggs and several dead moths suggested a lull in the cycle and the early return of the eggs to the refrigerator refuge. Despite the existing Apollo 10 involvement with its possible diversion, the skill of recall was practiced with each child dictating a story about the silkworm and illustrating his own story. These stories they were eager to read to their classmates. They were eager, also, to hear their fellow authors read to them.

The following story samples reveal not only language skill but the intellectual awareness of change, the cyclic process, and causality. Some phrases appear to indicate a relationship to their own lives.

Suzanna	The moths came out of the cocoon and one of the silkworms are spinning. The cocoon is all over the place. The other silkworm started to spin.
Ana	This is a box of silkworms. They are eating mulberry leaves. They are fat because they eat too much and they're greedy. Two of them fight over the leaf.

Alexine	The silk comes from the silkworms mouth. The silkworm is yellow when he's spinning. The silkworm gets fat before he spins.
Sally	The caterpillar is getting ready to spin. Some milk is coming out of his mouth. He is finding a good place to spin, and she is going to lay eggs when she comes out of the cocoon. She wants to fertilize the eggs. She found one man and she liked him. She found a good place to lay her eggs. She was very happy.
Susan	The female is looking for the male. The male is fertilizing the female. He has to or the egg wouldn't turn out good. The silkworm spins the cocoon so he can turn into a moth.
Mary	There is 22 eggs. There is 3 worms. They are eating the leaf. They think it is good to eat. They go "Yummy, yummy I got love in my tummy."
Jeanne	This is two silkworms. They're going over to see the moth on top of the cocoon but she was laying eggs on the cocoon. She said, "Go away or I can't make eggs on the cocoon." Then they went away.
Sandra	This is a silkworm. The silkworm is spinning her cocoon and when she comes out of the cocoon then she is going to mate with the father and then she'll lay her eggs.
Gary	These are silkworms. They are chewing the mulberry leaves. The silkworms were little, and are growing and growing, and they are good. When you put them in your hand and they tickle when they're on your hand.
Ruben	This is a caterpillar. They crawl in your hands. They tickle you. They have many legs.
Frank	A caterpillar turns to moth. He doesn't eat in the cocoon. He eats when he's a worm. He doesn't eat when he's a moth but he dies.

While little eyes and fingers prodded mulberry leaves and cocoons, little minds discovered the cycle of life and also moved up and out into space with equal ease.

On Monday, May 19, while cocoon spinning was still much in evidence, these second graders were sharing Sunday's T.V. experience of observing the Apollo 10 blast off. "Blast off, what's that?" inquired Sally who had missed the T.V. experience. Words, so important in this classroom where reading is taught in orchestrated fashion, rather than from basal texts, thus dominated the total class planning time. The teacher listed the space words shared by the children from Sunday's T.V. education beginning with Sally's interest in "blast off."

Blast off
Venus
Earth
Rocket
Fuel
Mars
Pluto
Saturn
Orbit
Stages
Mercury
Moon
Neptune
Space Ship
Landing
Jupiter
Craters
Sun
Capsule
Spalsh down

The discussion of the planning session indicated the need of the children for talking at a more factual level just as the teacher had anticipated, and so each committee met her that day for a discussion, of which she kept careful verbatim records.

Sentence strips were used to record the most important summary statement upon which the group agreed and the various sentence strips contributed by the different committees were set up along the chalk board ledge for the members of the class to use independently, as they surely did.

They read:

The moon reflects the sun's light.
The moon doesn't have water.
There is not much gravity on the moon.
The moon doesn't have air.
The nights are freezing cold.
Falling stars made the craters.

Overnight, the teacher's transcription of each committee's total discussion was organized and typed in the following manner:

What We Know About the Moon

"You look straight and it's far away," thought Charles.
"There's no air on the moon," said Rudy.
"The Earth is bigger than the moon," said Mary.
"When I look up it looks like it's moving," thought Espie.
"When the moon is half, the other half stays there," said Sally.

New Things We Learned About the Moon

The moon goes around the earth.
The moon is hot in the day and freezing at night.
The holes on the moon are called craters.
The moon has no water, so there are no people and no flowers. There are no houses and no stores.
As the moon goes around the earth you can see more of the sunlit part.

by Rudy's committee

Each child was given a personal book with a page for each of all the committee's discussions, and during the time from blast-off to splash-down, the various committees read these books with the teacher. In some cases she read to them and in some cases the child read, whatever seemed most comfortable and natural. In all cases, science and reading were orchestrated. The words on the original board list of space words were recognized in the individual books, and underlined or circled. New space words were identified and marked in the book as they were added to the space text.

Concurrently with this reading of committee findings, the class was charting (with both notations and illustrations) Apollo 10's course.

Apollo 10

May 19: Halfway to the moon.
May 20: Still on its way to the moon.
May 21: They reached the moon.
May 22: They are orbiting the moon. Snoopy left Charley Brown to look closer at the moon. There they joined up again.
May 26: Apollo 10 splashed down.

With all the rich language world available orally and in printed symbol to mediate this major thrust of man's adventuring spirit, some children chose to write and illustrate their very own stories.

Suzanna wrote.

The Apollo 10 went to the moon. They took pictures of the moon.

Terry's illustrated book read:

Apollo 10 is going to the moon. It is going to land in the ocean.

Terry had entered this orchestrated class from another school carrying a not-too-attractive report regarding her ineffectiveness and a partially used workbook in which her inadequate performance clearly revealed her lack of understanding and her noninvolvement. She had said to her teacher: "Will you make me do all this book?" When told she need not finish it, her face brightened. Her individual stories which she can and does read enthusiastically are a real asset to the reading center.

On June 2 there were but 3 days left of school. The Apollo 10 had splashed down and the silkworm eggs were soon to be refrigerated. Do we dare hope that no intellectual skills will be refrigerated with the silkworm eggs? Do we dare hope for new "blasting off" of questioning and reading involvement?

We can't help but wonder about these children and their future splash downs.

Will Sally always feel unembarraseed to ask, "What's that?"

Will Susan continue to speak realistically and naturally about life processes?

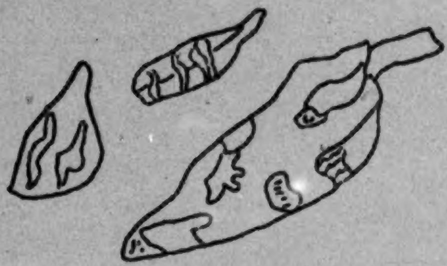
Will Terry always write and read enthusiastically, or will she be too inhibited because of adult imposition of standard expectations?

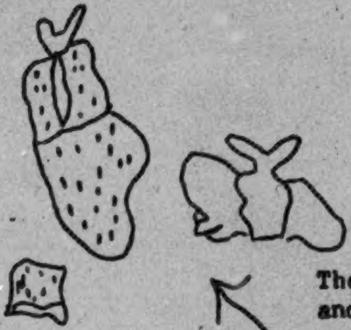
Will Norman be accepted as a learner next year and the next year and the next so that tommorrow's society can provide a place for his contributions?

Will it be an orchestrated third grade or a third grade of teacher-controlled sequencing of skills?

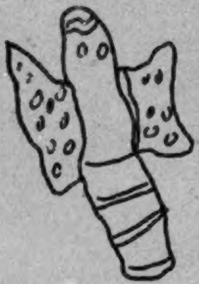
CIRCLE OF LIFE

Silkworms



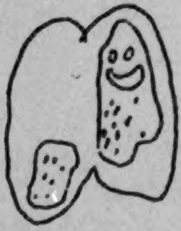


They mate
and the female
moth lays eggs.
The moths die
in 3 or 4 days.

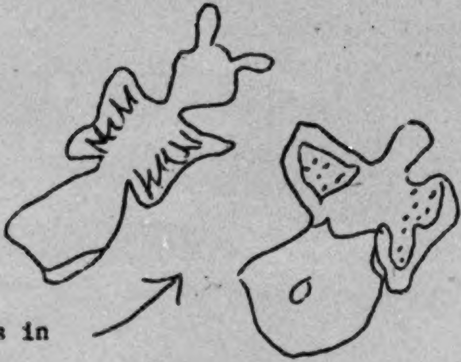


Male moths and
female moths come
out of the cocoons.

The eggs hatch.
The young worms
eat mulberry leaves.
They eat and eat.



The grown worms
spin cocoons



Chrysalis in
cocoon.

BILINGUAL EARLY EDUCATION PROGRAM (SEDL)

Supplementary Materials

Seven Model Lessons, reprinted from Southwest Education Development Laboratory, Model Lessons Bilingual Kindergarten (Austin, Texas: SEDL, 1971), pp. 129-130; 134-135; 143-145; 166-167; 171-173; 179-181; 182-183.

Instructional Units, reprinted from Southwest Education Development Laboratory, "The Bilingual Early Childhood Program," mimeograph, n. d., pp. 4-6.

Staff Development Materials, reprinted from Southwest Education Development Laboratory, "The Bilingual Early Childhood Program," mimeograph, n. d., p. 6.

Sample Schedule, reprinted from Southwest Education Development Laboratory, Teacher's Manual Kindergarten Program (Austin, Texas: SEDL, 1971), pp. 72-78.

DEMONSTRATION LESSON 1: LESSON GUIDE

KINDERGARTEN *MUSICAL INSTRUMENTS* *VISUAL TRAINING*

Spatial Relationships -- Large Parquetry Blocks Design
(in Spanish)

Objective

Conditions: 1. *Show the child a parquetry puzzle design and give him four parquetry blocks.*

2. *Tell the child, PLACE EACH BLOCK ON TOP OF THE DESIGNS WHICH ARE THE SAME COLOR AND SHAPE AS THE BLOCKS.*

Behavior: 3. *The child will place each block on top of the correct designs.*

Purpose *The purpose of this lesson is to develop the child's ability to reproduce a three-dimensional design from a two-dimensional model using parquetry blocks.*

Materials

(x) Large parquetry blocks - Developmental Learning Materials
(x) Large parquetry design - Developmental Learning Materials

Precautions

Special Instructions *This is a lesson for no more than eight children.*

Spatial Relationships -- Large Parquetry Blocks Design

PROCEDURE

Introduction Display the completed parquetry puzzle on the table. Convey that what the children are about to do is fun and a challenge. Tell the children that they are going to put a really hard puzzle together.

Demonstration First, take out the blocks, one at a time, and discuss their shapes and the designs from which they were removed. Call attention to the fact that each block and its design are the same color and shape. To emphasize this, you may want to trace with your finger the shape of the block and the space from which it came.

Next, place four or five blocks back in their appropriate spaces, carefully matching the blocks to their designs in the box. After you have placed the blocks, ask the children to check your work by picking up and comparing the blocks to the patterns.

Have the children explain what they are to do. Clear up any misunderstanding.

Interaction Ask each child to place one or two blocks until all the blocks are replaced in the puzzle form.

As each child finishes, check his work and praise his correct responses, explaining specifically why he is being praised.

Conclusion

T: WE MATCHED ALL THE BLOCKS TO THEIR DESIGNS AND HAVE LEARNED HOW TO PUT THIS PUZZLE TOGETHER. I WILL PUT THE PUZZLE OUT IN THE ROOM, AND YOU MAY TRY TO DO THE SAME THING ALL BY YOURSELF.

DEMONSTRATION LESSON 2: LESSON GUIDE

KINDERGARTEN
UNIT NINE

TRANSPORTATION

PRE-WRITING (e)

The Letters T,t
(in Spanish)

Objective

Conditions: 1. Give the child a mimeographed sheet of dotted line examples of small t's and capital T's and a primary pencil.
2. Tell the child to connect the dots.

Behavior: The child will connect the dots to form a capital T and a small t.

Purpose The purpose of this lesson is to develop the ability to write the letter T,t.

Materials Chalkboard Chalk Letter card without guides Ditto master for worksheets: dotted T's and t's. Primary paper Primary pencils	Before the lesson run off a copy of the worksheet for each child.

Precautions

Special Instructions This is a lesson for no more than eight children.

The Letters T,t

PROCEDURE

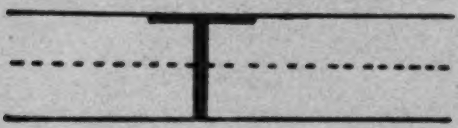
Introduction Draw guidelines on the chalkboard to resemble a sheet of primary paper. As you do this, ask the children to tell you what you might be drawing.

T: I'M GOING TO DRAW SOMETHING ON THE BOARD. WATCH CAREFULLY TO SEE WHAT IT MIGHT BE!

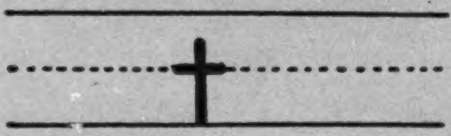
After the children identify the drawing, ask them to name the various parts. Next introduce what you and the children are going to do.

T: TODAY, WE ARE GOING TO LEARN TO DRAW THE CAPITAL LETTER T AND THE SMALL LETTER t.

Demonstration & Interaction Draw the two letters on the board within the guidelines. Describe what you are doing.



Make a tall line down beginning at the top guideline and stopping at the bottom guideline. Then, make a line across the top guideline.



Make a line down. Be careful that the vertical line begins between the top guideline and center guideline. Then, draw a line across on the center guideline.

Ask the children to name both the capital letter and the small letter.

To check the children's understanding, show them a letter card without guides and ask each one to fingertrace the capital T and to describe how the letter is written. Repeat the procedure with a small t.

Give each child a copy of the worksheet. Demonstrate connecting the dots of the first example (T), describing the strokes in each letter. Have the children complete the row. Then demonstrate connecting the dots of the small t, describing how to write the letter. Have the children complete the row.

After the children have completed the page, work with each child individually to check his knowledge of the letter names and to see if he connected the dots with straight lines. Any child who has difficulty may repeat the worksheet or practice on primary paper.

Conclusion Ask the children what they learned to do.

C: We learned how to draw the capital letter T and the small letter t.

DEMONSTRATION LESSON 4: LESSON GUIDE

KINDERGARTEN AUDITORY TRAINING

Rhyming Words
(in Spanish)

Objective

Conditions: 1. Show the child three or four pictures, two or three of which rhyme.
2. Tell the child, PUT THE PICTURES THAT RHYME TOGETHER AWAY FROM THE PICTURES THAT DO NOT RHYME.

Behavior: The child will group together the pictures that rhyme.

Purpose The purpose of this lesson is to develop the child's awareness of rhyming words.

Materials (y) Pictures for poems previously introduced.

Precautions (1) Be sure that all the children can see.
(2) Be sure the children use the correct names for the pictures, or the words will not rhyme.

Special Instructions This is a lesson for no more than eight children. Have the children sit in chairs, facing the chalkrail or wall where the pictures will be placed.

Rhyming Words

PROCEDURE

Introduction Have the group recite the poems. When each rhyming word is mentioned, hold up the corresponding picture. After reviewing the poems, say:

T: NOW WE ARE GOING TO PLAY A GAME USING ALL THESE PICTURES. I AM GOING TO PUT SOME PICTURES ON THE BOARD, AND YOU HAVE TO PUT THE PICTURES OF THE WORDS THAT RHYME TOGETHER.

Demonstration Place three pictures, two that rhyme and one that does not, on the chalkrail, or tape them on the wall. To identify each picture, state the word that it represents. Be sure to pronounce the words carefully and slowly.

Then select the two pictures that rhyme and place them on the chalkrail or wall, separate from the picture that does not rhyme. As you do this say,

T: I AM PUTTING THESE PICTURES TOGETHER BECAUSE THEY RHYME.

Ask the group:

T: WHY DID I PUT THESE PICTURES TOGETHER?

Remove the pictures and select four pictures -- two sets of two rhyming words. Have the group state the word that each picture represents. Then ask:

T: WHAT DO WE DO WITH THE PICTURES?

If the group tells you to place specific pictures together, ask them why they go together. If they do not answer your question, ask:

T: WHICH WORDS RHYME? WHAT RHYMES WITH _______? WHAT DID I SAY WE WERE GOING TO DO WITH THE PICTURES THAT RHYME?

Give a third demonstration only if the group shows they do not understand the activity.

Interaction Repeat the demonstration procedure using different sets of pictures. You may vary the sets in the following ways: three pictures that rhyme and one that does not; two pictures that rhyme and two that do not; two sets of two pictures that rhyme; etc.

Alternate group and individual responses. Each child should be given at least one opportunity to respond individually.

Conclusion Before dismissing the group ask:

T: WHAT HAVE WE BEEN DOING?

Summarize the children's answers.

DEMONSTRATION LESSON 7: LESSON GUIDE

KINDERGARTEN ANIMALS MOTOR TRAINING

Footsteps
(in Spanish)

Objective

Conditions: 1. Show the child a footstep pattern of two colors.
2. Tell the child, PUT YOUR FOOT WITH THE BLACK RIBBON ON THE BLACK STEPS AND YOUR FOOT WITH THE RED RIBBON ON THE RED STEP.

Behavior: The child will walk the pattern as directed.

Purpose The purpose of this lesson is to develop balance and coordination.

Materials
(x) Ten red stones or foot patterns made of plastic cloth or paper
(x) Ten black stones or foot patterns made of plastic cloth or paper
One red ribbon
One black ribbon

Precautions

Special Instructions This is a lesson for no more than eight children. Before the lesson lay out a series of step patterns. Vary the lead foot and the size of the stride, and require the children to cross their feet at times.

Footsteps

PROCEDURE

Introduction

T: TODAY WE ARE GOING TO PLAY A GAME. SEE THESE PATTERNS ON THE FLOOR. WHO CAN NAME THE COLORS? WE ARE GOING TO WALK AROUND THESE PATTERNS.

Demonstration & Interaction Tie a black ribbon around the shoe of a child's left foot and a red ribbon around the shoe of his right foot. These ribbons offer clues to which foot he uses since the verbal concepts of "left" and "right" are not introduced.

T: PUT THE FOOT WITH THE BLACK RIBBON ON THIS STEP. NOW, PUT YOUR RED FOOT ON THE NEXT STEP. NOW WALK AROUND ALL OF THE STEPS, PUTTING YOUR BLACK FOOT ON THE BLACK STEPS AND YOUR RED FOOT ON THE RED STEPS. DO NOT SKIP ANY AND DO NOT BACK UP. YOU MUST ALWAYS STEP ON THE VERY NEXT STEP. DO NOT STEP ON THE FLOOR, ONLY ON THE STEPS.

You and the assistant teacher demonstrate the lesson and assist the children on their first tries. Let the children practice with several different patterns.

Observe whether each child has difficulty adjusting the length of his stride, crossing one foot over the other, or leading with one side or another.

Conclusion Ask the children what they did during the lesson.

DEMONSTRATION LESSON 8: LESSON GUIDE

KINDERGARTEN *EXPLORING AND DISCOVERING*

Stating Rules for Classifying Three-Dimensional Objects

Objective

Conditions: 1. Give the child a collection of objects which have been grouped according to an identical property or property value.

2. Ask him to state the rule for the classification, e.g., WHY WERE THESE OBJECTS PUT TOGETHER? WHAT DO THEY ALL HAVE THAT IS THE SAME?

Behavior: The child will state the rule for the classification, e.g., "These are together because they all have the same size/color/etc," or "They are all large/red/etc."

Purpose *The purpose of this lesson is to develop the child's ability to verbalize concepts dealing with properties and their relationships to classification activities.*

Materials *Tray* *Three new crayons, two red, one purple* *Two new pieces of white chalk* *Two squares of white paper, one flat and one wrinkled* *One square of purple paper, wrinkled* *Two balls, different in size and color* *Two toy cars, same shape, different colors*	*Before the lesson, place the objects on the tray.*

Precautions *If you must make substitutions for the materials listed, select items which best meet the lesson objective.*

Special Instructions *This is a lesson for eight children seated either at a table or on the floor, facing you.*

Partially hide the tray of objects.

You may wish to begin using the term "set" to refer to a group or collection of objects. If so, use the word casually, e.g., "Look at this set of crayons." Do not expect the children to verbalize "set." The language of sets will be introduced and studied extensively in a later unit.

Stating Rules for Classifying Three-Dimensional Objects

PROCEDURE

Introduction The first part of the lesson is an active game for the children.

T: CHILDREN, WE ARE GOING TO PLAY A GAME IN WHICH YOU WILL ALL LOOK VERY CAREFULLY FOR SOMETHING. ARE YOU READY?

Demonstration & Interaction

T: I WANT ALL THE CHILDREN WHO ARE WEARING BROWN SHOES TO STAND UP. (children stand.) ARE ALL THESE CHILDREN WEARING BROWN SHOES? VERY GOOD. NOW, LOOK AT THE SHOES OF THOSE AROUND YOU. DID EVERYONE WITH BROWN SHOES STAND UP?

(FELIX), WHAT COLOR ARE YOUR SHOES? YES, THEY ARE BROWN, SO PLEASE STAND UP.

NOW, (point to the children who are standing) THIS IS THE SET OF ALL THE CHILDREN WHO ARE WEARING BROWN SHOES. NOW, (point around the children standing) IN THIS SET, REMAIN STANDING IF YOU ARE WEARING SOMETHING COLORED BLUE. IF YOU ARE NOT WEARING SOMETHING BLUE, PLEASE TAKE YOUR SEAT.

(ROBERTO), WHAT IS (MAX) WEARING THAT IS BLUE COLORED? HIS SHIRT, GOOD. WHAT IS (MARIA) WEARING THAT IS COLORED BLUE? HER DRESS, GOOD.

Continue until each standing child's "blue" is pointed out. Then ask:

T: CAN SOMEONE TELL ME WHY THIS SET OF CHILDREN (point to children standing) ARE TOGETHER? YES, THEY ARE WEARING SOMETHING THAT HAS THE COLOR, BLUE.

Help the children verbalize this statement, if necessary. They are all wearing brown shoes is also an acceptable response.

Continue asking for other classifications, e.g.,

- all who are left handed (if dominance has already been established
- all who are wearing rings
- all who are wearing belts
- all who are wearing white socks
- all who are wearing shirts
- all who are wearing blouses

In each activity, give the rule of classification. Then, after each classification, ask the children to state the rule. In this way, they form the habit of not only looking for how members of a set are alike but also verbalizing the rule for the classification.

To complete the lesson objective, place the tray of objects before the children. Begin by selecting two objects with an obvious common property, and ask a child to tell why you put those objects together i.e., to state the classification rule. The child observes the object and states the rule, e.g., "They have the same color/shape/size etc." or "They are both red/square/large/etc."

Increase the number of objects to three and repeat the procedure, e.g.,

Three crayons have the same shape/size/length
Two pieces of white chalk and one piece of white paper have the same color
Two purple crayons and one square of purple paper have the same color

After each child has had several turns to state a classification rule, let one child select a set of objects according to some rule (property) and ask the remaining children to tell what the rule is. The children may take turns selecting sets.

Conclusion

T: CHILDREN, WHAT HAVE WE BEEN LEARNING TO DO IN THIS LESSON? (Children respond.) YES, WE HAVE LEARNED TO STATE A RULE FOR CLASSIFYING OBJECTS; THAT IS, WE PUT OBJECTS TOGETHER ACCORDING TO SOME PROPERTY WHICH WAS THE SAME FOR EACH OBJECT IN THE GROUP.

DEMONSTRATION LESSON 9: LESSON GUIDE

KINDERGARTEN IDEAS AND CONCEPTS

Animals

Objective

Conditions: 1. *Show the child a group of objects and animals.*
2. *Ask the child,* HOW DO YOU KNOW THIS IS AN ANIMAL/ NOT AN ANIMAL?

Behavior: *The child will answer, "Because it moves, eats, grows and has babies/does not move, eat, grow or have babies."*

Purpose *The purpose of this lesson is to extend the child's knowledge of animals and to teach critical differences between living and non-living things.*

Materials

Any live animals that can be brought safely into the room.
An animal with babies (you may use a picture)
Balloon
Wind-up car
Stuffed or ceramic animal with babies
Apple

Precautions

Special Instructions *This is a lesson for no more than eight children.*

Animals

PROCEDURE

Introduction Remind the children of previous animal studies. Tell them that today they will talk about animals again.

T: WE ARE GOING TO LOOK AT THINGS ABOUT ANIMALS THAT MAKE THEM DIFFERENT FROM THINGS THAT ARE NOT ANIMALS.

Demonstration & Interaction Introduce several animals and discuss their various essential characteristics - self-movement, eating, growing, having babies.

T: WHAT KIND OF ANIMAL IS THIS? HOW DO YOU KNOW IT'S AN ANIMAL?

If the children need a less abstract question ask:

T: WHAT DO ANIMALS DO?

Bring out the four life characteristics by asking specific questions such as:

T: HOW DO ANIMALS GET FROM ONE PLACE TO ANOTHER? DO BABY ANIMALS ALWAYS STAY BABIES? WHAT DO ANIMALS DO THAT MAKES THEM GROW? WHERE DO BABY ANIMALS COME FROM?

Show the children non-animals that possess some, but not all of the four life characteristics. Ask the children why these things are not animals.

Suggested objects:

- a wind-up car which moves
- a ceramic model of an animal with babies
- a toy animal that moves and has toy babies
- an apple
- a balloon which grows (as it is filled with air) and moves (when you let it go)

Conclusion Summarize the activity by discussing that in order for something to be an animal, it must have all four of the life characteristics mention

Cause and Effect (2): Inferring a Cause

Objective

Conditions: 1. *Show the child two items, one a transformation of the other.*
2. *Ask the child to tell what might have happened to cause the effect he sees in the transformed object.*

Behavior: *The child will state a possible cause of the transformation.*

Purpose *The purpose of this lesson is to develop the child's ability to relate physical causes and effects.*

Materials

Three balls of clay (two round, one flat)
Three jars of paint (two powdered, one mixed with water)
Two matches (one with a blackened end)
Three sheets of paper, one crumpled and then straightened
Three swatches of cloth, one with a rip that has been repaired
Three ballons, one inflated
Three pieces of spaghetti, one soaked in water
Three cottonballs, one dipped in water and wrung out
For verification:
water
needle
thread
scissors

Precautions

Special Instructions *This is a lesson for no more than eight children seated in a semicircle. Keep all the materials out of the children's view, except the objects being discussed.*

Cause and Effect (2): Inferring a Cause

PROCEDURE

Introduction

T: I AM GOING TO SHOW YOU TWO THINGS THAT WERE ALIKE. BUT SOMETHING HAPPENED TO ONE OF THEM.

Demonstration

T: I PUT TWO BALLS OF CLAY ON THE SHELF. THEY BOTH LOOKED LIKE THIS (hold up ball of clay). WHEN I CAME BACK LATER, ONE OF THEM HAD BEEN CHANGED. (Hold up flattened lump of clay). WHAT COULD HAVE HAPPENED TO MAKE IT LOOK LIKE THIS?

Demonstrate the transformation using the second ball of clay and pressing it with your hand.

Interaction

Show the two jars of paint.

T: BOTH OF THESE JARS OF PAINT LOOKED LIKE THIS (hold jar of powdered paint). WHAT DO YOU THINK HAPPENED TO THIS PAINT (hold jar of mixed paint) TO MAKE IT LOOK LIKE THIS?

Call on one child to answer.

Carry out the action suggested by the child, whether it is correct or incorrect. If the action he suggests is incorrect, encourage him to suggest another possible cause. Always verify or demonstrate the correct transformation.

Ask another child:

1. WHAT HAPPENED TO THIS MATCH?
2. WHAT HAPPENED TO THIS PIECE OF PAPER?
3. WHAT HAPPENED TO THIS HOLE IN THE MATERIAL?
4. WHAT HAPPENED TO THIS BALLOON?
5. WHAT HAPPENED TO THIS PIECE OF SPAGHETTI?
6. WHAT HAPPENED TO THIS COTTONBALL?

Conclusion Review the transformation that was made on each item.

INSTRUCTIONAL UNITS

LEVEL I

English	Spanish
Introduction to School, Unit 1	Introducción a la escuela, Unidad 1
Body Awareness, Unit 2	Conciencia del "yo" físico, Unidad 2
Body Awareness, Unit 3	Conciencia del "yo" físico, Unidad 3
Clothing, Unit 4	La ropa, Unidad 4
Food, Unit 5	La comida, Unidad 5
Food, Unit 6	La comida, Unidad 6
House, Unit 7	La casa, Unidad 7
Appliances, Unit 8	Los aparatos, Unidad 8
Animals, Unit 9	Los animales, Unidad 9
Animals, Unit 10	Los animales, Unidad 10
Vehicles, Unit 11	Los vehículos, Unidad 11
Musical Instruments, Unit 12	Los instrumentos musicales, Unidad 12
Toys, Unit 13	Los juguetes, Unidad 13
Family, Unit 14	La familia, Unidad 14
Community Helpers, Unit 15	Los ayudantes de la comunidad, Unidad 15
Community Helpers, Unit 16	Los ayudantes de la comunidad, Unidad 16
Buildings, Unit 17	Los edificios, Unidad 17
Self-Awareness, Unit 18	Conciencia de sí mismo, Unidad 18
Self-Awareness, Unit 19	Conciencia de sí mismo, Unidad 19
Clothing, Unit 20	La ropa, Unidad 20
Food, Unit 21	La comida, Unidad 21
Food, Unit 22	La comida, Unidad 22
House, Unit 23	La casa, Unidad 23
Natural Environment, Unit 24	La naturaleza, Unidad 24
Community Environment, Unit 25	El ambiente de la comunidad, Unidad 25

LEVEL II

English	Spanish
Introduction to School, Unit 1 (for new pupils)	Introducción a la escuela, Unidad 1 (for new pupils)
School, Unit 1 (for continuing pupils)	La escuela, Unidad 1 (for continuing pupils)
Family and/or Persons, Unit 2	La familia y/o personas, Unidad 2
Animals, Unit 3	

LEVEL II (continued)

English	Spanish
	Los animales, Unidad 3
Vehicles, Unit 4	Los vehículos, Unidad 4
Clothing, Unit 5	La ropa, Unidad 5
Musical Instruments, Unit 6	Los instrumentos musicales, Unidad 6
Food, Unit 7	La comida, Unidad 7
Community Workers, Unit 8	Los trabajadores de la comunidad, Unidad 8
Tools, Unit 9	Las herramientas, Unidad 9
Body Awareness, Unit 10	Conciencia del 'yo' físico, Unidad 10
Buildings, Unit 11	Los edificios, Unidad 11
Money, Unit 12	El dinero, Unidad 12
Toys, Unit 13	Los juguetes, Unidad 13
Furniture, Unit 14	Los muebles, Unidad 14
Wild Animals, Unit 15	Los animales salvajes, Unidad 15
Fish, Birds, and Insects, Unit 16	Los peces, pájaros e insectos, Unidad 16
Family, Unit 17	La familia, Unidad 17
Food, Unit 18	La comida, Unidad 18
Clothing, Unit 19	La ropa, Unidad 19
Furniture, Unit 20	Los muebles, Unidad 20
Tools, Unit 21	Las herramientas, Unidad 21
Buildings, Unit 22	Los edificios, Unidad 22
Community Helpers, Unit 23	Los ayudantes de la comunidad, Unidad 23
Musical Instruments, Unit 24	Los instrumentos musicales, Unidad 24
Self-Awareness, Unit 25	Conciencia de sí mismo, Unidad 25

LEVEL III

English	
School, Unit 1	La escuela, Unidad 1
School Safety, Unit 2	Seguridad en la escuela, Unidad 2
Community Helpers, Unit 3	Los ayudantes de la comunidad, Unidad 3
Community Helpers, Unit 4	Los ayudantes de la comunidad, Unidad 4
Body Awareness, Unit 5	Conciencia del "yo" físico, Unidad 5
Body Senses, Unit 6	Los sentidos del cuerpo, Unidad 6
Body Senses, Unit 7	Los sentidos del cuerpo, Unidad 7
Clothing, Unit 8	La ropa, Unidad 8
Clothing, Unit 9	La ropa, Unidad 9
Food, Unit 10	La comida, Unidad 10
Food, Unit 11	La comida, Unidad 11
Health, Unit 12	
Toys, Unit 13	

LEVEL III (continued)

English

Family, Unit 14
Classroom Environment, Unit 15
Classroom Environment, Unit 16
Community Environment, Unit 17
Community Environment, Unit 18
Materials, Unit 19
Plants, Unit 20
Animals, Unit 21
Transportation, Unit 22
School, Unit 23
Self-Awareness, Unit 24
Self-Awareness, Unit 25

Spanish

La salud, Unidad 12
Los juguetes, Unidad 13
La familia, Unidad 14
Ambiente de la sala de clase, Unidad 15
Ambiente de la sala de clase, Unidad 16
Ambiente de la comunidad, Unidad 17
Ambiente de la comunidad, Unidad 18
Los materiales, Unidad 19
Las plantas, Unidad 20
Los animales, Unidad 21
Transportación, Unidad 22
La escuela, Unidad 23
Conciencia de sí mismo, Unidad 24
Conciencia de sí mismo, Unidad 25

STAFF DEVELOPMENT MATERIALS

Teachers

Teacher's Manual

Setting Up the Classroom

Model Lessons

Overview of the Early Childhood Program

Testing the Children

Classroom Management

Teacher Expectations

Incidental Learning and Modeling

Helping Children Learn

Every Child Learns: Adapting the Curriculum to the Individual's Needs

Using Learning Materials with Young Children

Coordinators and Administrators

Coordinator's Handbook

Administrator's Handbook

Parent Involvement Activities

School [illegible] After: Parents Help

Parent Education Activities, Units 1 - 5

Parent Education Activities, Units 6 - 10

Parent Education Activities, Units 11 - 15

Parent Education Activities, Units 16 - 20

Parent Education Activities, Units 21 - 25

These are five booklets for each program level to provide home activities for parents that extend learning for the child.

SAMPLE SCHEDULE

Site Description

Time: 8:15 - 2:30

Number of Children: 30

Services: Breakfast, 8:30; Lunch, 11:00; Snack, 1:50

Basic General Schedule

8:15 - 8:30	Arrival; Self-Chosen Activity
8:30 - 9:00	Toilet; Breakfast
9:00 - 9:10	Meeting-Greeting
9:10 - 10:30	Language Lessons; Visual or Auditory Lessons; Assigned Activity; Self-Chosen Activity
10:30 - 10:40	Clean-up
10:40 - 11:00	Outside Play or Motor Lesson
11:00 - 11:30	Toilet; Lunch
11:30 - 11:45	Rest
11:45 - 1:05	Ideas and Concepts or Thinking and Reasoning Lessons; Pre-Writing Lesson or Review or Remedial Lessons; Assigned Activity; Self-Chosen Activity
1:05 - 1:30	Outside Play or Motor Lesson; Toilet
1:30 - 1:50	Auditory Lesson; Art; Music; or other Related Activities
1:50 - 2:10	Snack
2:10 - 2:30	Story; Dismissal

Specifics of Schedule

8:15 - 8:30 Arrival; Self-Chosen Activity

During this short period the children are greeted informally as they come in and helped to put away clothing or belongings (if any). They are invited to choose equipment to use for a brief time.

8:25 Transition: Clean-up; Prepare to go to Breakfast

8:30 - 9:00 Breakfast; Toilet

Exact procedures here will vary by site, depending on whether the children eat in their room or in a cafeteria, whether both teachers need to stay with them during this time, etc. Stagger the groups in order to prevent crowding during toileting and washing hands. It should not be necessary to form lines.

9:00 - 9:10 Meeting or Greeting

Talk informally with the children to establish a positive atmosphere and to prepare them for the day's activities. Give specific directions to each group and dismiss one group at a time.

9:10 - 10:30 Four groups are formed to rotate during this period:

Monday

	Group A	Group B	Group C	Group D
9:10 - 9:30	Language	Visual	Assigned Activity	Self-Chosen Activity
9:30 - 9:50	Self-Chosen Activity	Assigned Activity	Language	Visual
9:50 - 10:10	Visual	Language	Self-Chosen Activity	Assigned Activity
10:10 - 10:30	Assigned Activity	Self-Chosen Activity	Visual	Language

Tuesday

	Group A	Group B	Group C	Group D
9:10 - 9:30	Self-Chosen Activity	Language	Auditory	Assigned Activity
9:30 - 9:50	Auditory	Self-Chosen Activity	Assigned Activity	Language
9:50 - 10:10	Assigned Activity	Auditory	Language	Self-Chosen Activity
10:10 - 10:30	Language	Assigned Activity	Self-Chosen Activity	Auditory

Note that rotation is such that different groups receive lessons first on different days.

Three transitions will be made within this period. You, the supervising teacher, dismiss children from your lessons to a self-chosen activity and gather children from independent work for lessons. The assistant teacher gathers children from independent work to teach them visual or auditory lessons. After she finishes the lesson with each group, she gives instructions for the assigned activity. Since the assistant teacher's lessons are usually shorter, she should circulate and give feedback to children in independent activities.

10:30 Transition:

The first teacher to finish supervises clean-up and handles other management duties until the second teacher finishes her lesson.

10:40 - 11:00 Outside Play or Motor Lesson

If the children go outside, one or both teachers should accompany them. If a motor lesson is given, this may be for the whole class or for a small group. If for a small group, one teacher conducts the lesson while other has the remaining children for games or some other activity. In bad weather one group might be in self-chosen activity.

10:55 Transition:

If the class has been outside or has had a very active motor lesson, take time to calm them down here. Then stagger the release of children to the restrooms.

11:00 - 11:30 Toilet, Lunch

11:30 - 11:45 Rest

Clear rules must be established about what the children can and cannot do during this time. Quiet activities should be allowed. This is a good time to play a story record or quiet music, or to read a story if the children can delay looking at pictures and making comments. If few children really relax, it may be better to eliminate the rest period entirely as a general activity, continuing it only for children who request it or seem to need it on a particular day.

11:45 - 1:05 Ideas and Concepts or Thinking and Reasoning; Pre-Writing Lesson or Review or Remedial Teaching; Assigned Activity; Self-Chosen Activity

Four groups are formed to rotate during this period:

Monday

	Group A	Group B	Group C	Group D
11:45 - 12:05	Ideas and Concepts	Pre-writing	Assigned Activity	Self-Chosen Activity
12:05 - 12:25	Self-Chosen Activity	Assigned Activity	Ideas and Concepts	Pre-writing
12:25 - 12:45	Pre-writing	Ideas and Concepts	Self-Chosen Activity	Assigned Activity
12:45 - 1:05	Assigned Activity	Self-Chosen Activity	Pre-writing	Ideas and Concepts

Tuesday

11:45 - 12:05	Self-Chosen Activity	Thinking & Reasoning	Review or Remedial	Assigned Activity
12:05 - 12:25	Review or Remedial	Self-Chosen Activity	Assigned Activity	Thinking & Reasoning
12:25 - 12:45	Assigned Activity	Review or Remedial	Thinking & Reasoning	Self-Chosen Activity
12:45 - 1:05	Thinking & Reasoning	Assigned Activity	Self-Chosen Activity	Review or Remedial

This time can be used for: ideas and concepts; thinking and reasoning; pre-writing; special lessons that extend the curriculum or broaden it; remedial lessons with groups of children who have not learned the objectives; and work with individual children (both remedial and enriching). Work with individuals should be done whenever one or both teachers are not busy with a group activity.

1:05 - 1:10 Transition

Clean-Up. Here the children should be supervised as they replace equipment and materials and prepare for going outside.

1:10 - 1:30 Outside Play or Motor Lessons

In bad weather this period can merge with the next period for music, dancing, or a more extensive special art project.

1:25 **Transition:** Stagger the release of children to the restrooms. Give specific directions to each group about what they are to do as they return to the classroom.

1:30 - 1:50 Auditory Lesson; Art; Music; Story; Other Related Activities.

You may form two or three groups for an auditory lesson or related activities. Some auditory lessons will need to be taught at this time if they are ones which the supervising teacher should teach.

As the year progresses and procedures are clearly established, two additional schedule choices may become feasible.

(1) This period (1:30-1:50) could be merged with the snack time following it. The period would then extend from 1:30-2:10. The snack could be left out during all or part of this period, and children could help themselves when and if they chose.

(2) One lengthy period could be formed from 1:30-2:30. This would allow you to form two or three groups for more extensive related activities as well as a possible auditory lesson. One of the teachers could be reading a story to a small group rather than to the whole class at once, as suggested in the time period 2:10-2:30. Again, sometime within this period, children could help themselves to a snack if they choose.

However, when the snack occurs at the same time as other activities children should be cautioned not to disrupt other on-going groups.

1:50 - 2:10 Snack

Snack time could be merged with the succeeding period, forming one extended period from 1:50 to 2:30. During such a period the children might enjoy learning a story or music while eating their snack.

2:10 - 2:30 Story; Dismissal

The schedule as shown above is typical for the early weeks of the year. In later weeks the time allotted for lessons can be extended. Later the schedule might look like this:

8:15 - 8:30	Arrival: Self-Chosen Activity
8:30 - 8:50	Toilet; Breakfast
8:50 - 9:00	Meeting or Greeting
9:00 - 10:30	Rotation of two groups in lessons, two groups in independent work
10:30 - 10:40	Clean-Up
10:40 - 11:00	Outside Play
11:00 - 11:30	Toilet; Lunch
11:30 - 11:45	Rest (optional); Related Activities
11:45 - 1:05	Lessons; Independent Activites (four groups)
1:05 - 1:25	Outside Play or Motor Lessons (Merge with the following period in bad weather.)
1:25 - 2:25	Rotation of two, three, or four groups for Auditory Lesson; Story; Art; Music; or Other Related Activities; Snack
2:25 - 2:30	Clean-Up; Dismissal

NOTE: Remember these sample schedules are intended only as guidelines. Your daily schedule should be flexible and adapted to the particular events and specific child needs which arise each day.

THE DARCEE/NPECE PRESCHOOL PROGRAM

Supplementary Materials

Daily and Weekly Sample Lesson Plans, reprinted from S. Claxton, D. Manis, et al., Teacher Training Manual, draft version, (St. Louis, Mo.: National Program on Early Childhood Education, August 1972), pp. 122-130.

Unit Concepts and Basic Skills and Two Instructional Activities, reprinted from Demonstration and Research Center for Early Education, DARCEE—Headstart Dissemination Project, "Instructional Unit 1: All About Us," mimeograph, September 1969, pp. i-iv; 1-5.

Sequencing Principles of the DARCEE Curriculum, mimeograph, n.d.

A Sample Day, Schedule and Evaluation, reprinted from C. Brown, For Beginning-to-be Teachers of Beginning-to-be Students, (Nashville, Tenn.: DARCEE,George Peabody College, 1971), pp. 58-60.

(continued on page 58)

DARCEE/NPECE Supplementary Materials (Continued)

Early Training Project, December Newsletter, reprinted from S. Gray R. A. Klaus, J. O. Miller, & B. J. Forrester, Before First Grade, (New York: Teachers College Press, 1966), pp. 110-111.

Overview of the DARCEE Home Visiting Program, reprinted from R. Giesy, (Ed.), A Guide for Home Visitors, (Nashville, Tenn.: DARCEE, George Peabody College, 1970), pp. 45-52.

Layout of General Research Design, Table 1, S. Gray & R. Klaus, The Early Training Project: A Seventh Year Report, (Nashville, Tenn.: DARCEE, George Peabody College, 1970), p. 4.

DAILY LESSON PLAN

Instructional Theme (Unit) Orientation

Teacher's Name Mrs. X Group First small group

Date First day Time 9:40-9:55

Objectives: [Behind each cognitive objective indicate appropriate pages from Record-Keeping System]

1. The children will be able to follow standards for using crayons & paper (Pre-cognitive objective --not in Record-keeping System)
2. The children will be able to manipulate (control) a crayon to draw on a sheet of paper (Pre-cognitive objective)

Strategies:

1. Set standards for keeping paper flat on the table
2. Talk about red crayon and demonstrate use (briefly)
3. Pass out paper—reinforce for following standards
4. Pass out baggies, each containing 1 red crayon
5. Prepare for clean-up a few minutes early
6. Write names on each child's picture
7. Collect pictures & crayons

Materials:

7 baggies --each containing 1 red crayon
14 sheets of plain white paper
1 black magic marker

Skill and Attitude Development for Specific Children:

Buffer:

Puppet — for guessing game — teacher describes a child at the table — children guess child's name

DARCEE CENTER Our School

Block Plan for Week of First week of school Unit Orientation

	Monday	Tuesday	Wednesday	Thursday	Friday
Large Group Activities	Standards: "Listening ears," "walking boots," "buttons," "looking glasses," "thinking caps" Explain – coded color name tags Demonstrate – carrying chairs	Standards Song – "Where is Mary" Song – "If You're Happy" Coded color groups follow-up Carrying chairs	Standards Song – "Where is Mary" Intro – "Good Morning Mr. Yellow Bird" Coded color groups Carrying chairs	Standards Song – "Good Morning Mr. Yellow Bird" Intro – Itsy Bitsy Spider (2) Color coded groups Carrying chairs	Standards Songs: Where is Mary, "If You're Happy," "Good Morning Mr. Yellow Bird," "Itsy Bitsy Spider." Color coded groups. Carrying chairs.
Small Group Activities	1st – Crayons & paper (red) Each table 2nd – Clay Each table	Paste & paper Clay	Counting cubes Lego blocks	Puzzles Manipulative toys	Crayons & paper (1 red – 1 blue) Counting cubes
Structured Free Choice	Intro. Choices 1. crayons & paper 2. clay 3. tearing pictures from magazines	1. paste & paper 2. crayons & paper 3. magazines	1. counting cubes 2. lego blocks 3. paste & paper	1. clay 2. puzzles 3. manipulative toys	1. puzzles 2. lego blocks 3. manipulative toys
Second Large Group	Reinforce standards "Where is Mary"	Reinforce standards "If You're Happy" Review day	Reinforce standards "Mr. Y. Bird" Review Day	Reinforce standards "Itsy Bitsy Spider" Review day	Reinforce standards Songs Review day.

DARCEE CENTER Our School

Block Plan for Week of Sixth Month Unit Neighborhood & Community

	Monday	Tuesday	Wednesday	Thursday	Friday
Large Group Activities	Introduce grocery store. Show sample items, describe items, [illegible] children select appropriate item from display	Introduce Service Station - Prepare children for guest, Mr. Green, service station attendant, who will discuss tools & services of his station	Introduce Barber Shop-Beauty Shop Demonstrate equipment of each. Have children label equipment. Discuss differences in hair textures	Introduce 5&10 Store - Prepare children for trip to 5&10 to purchase box of crayons for each	Quiz on 4 businesses introduced during week - children draw questions from a can
Small Group Activities	1. Classification of fruits & vegetables cardboard models 2. Water color painting	1. Introduce solid shapes - sphere & cube 2. Paste & paper following model of service station	1. Story "Straight Hair-Curly Hair" 2. Flannel cutouts Numeral recognition 1-6	1. Trip to 5&10 2. Experience chart of trip to 5&10	Puzzles - second level 8-12 pieces
Structured Free Choice	1. Housekeeping 2. Rig-a-Jigs 3. Fit-a-Space	1. Pegboards - single sheet patterns 2. Unit blocks 3. Magic Markers and paper	1. Paste & paper basic shapes 2. Housekeeping 3. Flannel story 4. Puzzles (unattended)	1. Dot Lotto recognizing sets 1-6 2. Patterning; Cubes; Sound-alike jars 3. Fine differences	1. Blocks (on floor) 2. Cutting large construction paper shapes 3. Beads - following directions 4. Books (unattended)
Second Large Group	1. Review day 2. Children select songs to sing 3. Talk about visitor tomorrow	1. Review day 2. Each child tell one thing he learned from special visitor	1. Review day 2. Each child name the toy he played with 3. Song "Raindrops & Gumdrops"	1. Review day 2. Read experience chart done in second small group	1. Review day 2. Play new song to learn on record player

DAILY LESSON PLAN

Instructional Theme (Unit) Neighborhood & Community

Teacher's Name Mrs. X Group First Small Group

Date Sixth Month Time 9:40 - 10:00

Objectives: [Behind each cognitive objective indicate appropriate pages from Record-Keeping System]

1. The children will be able to label cardboard food models of fruits and vegetables (p. 65, objective #1)
2. The children will be able to take turns selecting cards from a pile turned face down on table and place cards in appropriate basket (p. 62, objective # 13)

Strategies:

1. Introduce cards having each child label picture
2. Explain and demonstrate selecting card and placing in appropriate basket as to fruit or vegetable
3. Let children take turns selecting card and label
4. Let group count, at end of game, number of cards in each basket to see which contains most cards

Materials:

Cardboard models of fruits and vegetables

Skill and Attitude Development for Specific Children:

Mary has been frustrated by several activities lately. This should be easy for her. Build up her confidence (self-esteem) on this activity. Since Bill & George have been bothering each other lately, I'll have them sit apart from one another

Buffer:

Construction paper cutouts to paste a collage
paste
plain sheets of paper

DAILY LESSON PLAN

Instructional Theme (Unit) Basic Skills

Teacher's Name Mrs. X Group First Small Group

Date Last month Time 9:50-10:15

Objectives: [Behind each cognitive objective indicate appropriate pages from Record-Keeping System]

1. Children will be able to identify missing parts in pictures of objects. (small details) (p. 24, objective #4)

Strategies:

1. Let children define standards for playing game
2. Show one picture - ask children what they think is wrong with picture
3. Let children take turns describing pictures and point out what is missing in each center
4. Show last picture at end of activity with nothing missing to see how many children guessed correctly

Materials:

"What's Missing" poster pictures

Skill and Attitude Development for Specific Children:

Pete has trouble with this kind of exercise. I'll call on him to find the objects on Pictures 1 & 4, the easiest ones. I'll praise him afterward.

Buffer:

Crayons & numeral coded dittos to color

DARCEE CENTER Our School

Block Plan for Week of last month of school Unit Basic Skills

	Monday	Tuesday	Wednesday	Thursday	Friday
Large Group Activities	Dramatization "Jack + the Bean Stalk" for repeating lines of story; sequencing story without aid from teachers	Describing objects using at least 3 statements; classroom objects will be used	Floating experiment (critical thinking) Objects that will and will not float Children guess + take turns experimenting	Film, "The Four Seasons" Children recall characteristics of each season at end of film	Execute 4-5 verbal commands in correct order Children volunteer to lead a song or fingerplay in front of group
Small Group Activities	1. "What's Missing Game"-Poster pictures fine discrimination 2. Writing names within defined lines on tablet paper (unattended)	1. Letter matching exercise (teacher leaves room) Independence 2. Whole-part-whole paste + paper Construct box from parts - no model	1. Sets - Identification of equivalent and non-equivalent sets 2. Sort pictures by living versus non-living things	1. Select from alternatives words that rhyme 2. Pegboards - design sheets with undefined area. Models. Independence (Teacher leaves room)	1. Extend patterns construction paper - size, shape, + colors 2. Identify words, labels for classroom objects + children's names.
Structured Free Choice	1. Housekeeping (unattended) 2. Pegboards - advanced design sheet (unattended) 3. Initial consonant sounds game	1. Follow the dot dittoes, primary size pencils 2. Puzzles 15-30 pieces (unattended) 3. Parquetry blocks undefined areas design cards (unattended)	1. Farm Lotto 2. Dramatization of Three Bears with Props 3. Fingerpaint - experimenting with color combinations	1. Bean bags with chalk board for scoring 2. Paste + paper collages (unattended) 3. Follow the model paste + paper - group effort - scene of house + dog.	1. Clue game - review unit concepts 2. Building blocks (unattended) 3. Dittos - reproduce numerals 0-10 (unattended)
Second Large Group	Recall day in sequence Children describe pictures; group guesses what is being described	Absurd statements Children define what's silly about statement teacher makes	Review of objects that float - Children also name objects they think would float + not float	Record player - loud + soft, high + low Sequence day	Review week's large group activities

STRUCTURED/DARCEE
November, 1969

DEMONSTRATION AND RESEARCH CENTER FOR E. E.
UNIT: ALL ABOUT US

I. Unit Concepts and Understanding

A. Everybody has a name.

B. The part of us that we see is called the body.
  1. Each part of the body has a name.
  2. The head has very special parts, each with a name.

C. Each part of the body has a special use.
  1. We use our legs and feet to move from one place to another and to walk, jump, run, hop, skip, dance, kick, etc.
  2. We use our arms to move and carry objects.
  3. We use our hands and fingers to touch, grasp, and carry objects and to clap to music.
  4. We use our eyes to see.
  5. We use our ears to hear sounds.
  6. We use our nose to help us breathe and to smell objects.
  7. We use our mouth to eat, talk, sing, whistle, and breathe.
  8. We use our teeth and tongue to chew food and to help us speak clearly.
  9. Our skin protects our body from rough objects.
  10. Our hair helps to keep us warm in cold weather.

D. We wear clothes on our bodies.
  1. Each piece of clothing has a name.
  2. Some clothes are worn by males (boys).
  3. Some clothes are worn by females (girls).
  4. Clothes help protect our bodies.

E. We are all alike in many ways.
  1. We have the same basic body parts.
  2. We have the same basic needs - food, water, exercise, sleep, etc.

F. We are different in many ways.
  1. We are different sizes.
  2. We have different colors of skin.
  3. We have different colors, textures, and lengths of hair.
  4. We have different colors of eyes.
  5. We are different sexes.
  6. We are different ages.
  7. Our voices are different.
  8. We have different abilities.
  9. We have different likes and dislikes.
  10. There are different ways that each of us feels at certain times - happy, sad, mad, etc.

G. Although we have many differences, we can work together as a group.
  1. We need rules for sharing food, toys, and materials.
  2. We need rules for taking turns.
  3. We need rules for caring for our classroom materials.

H. Our bodies grow and change.

I. We are all living things because we grow and change.

II. Basic Skills to be Developed

The following objectives are listed to give you direction and goals for the activities you plan and implement during the unit. The goals may look rigid but they are not intended to be so. You will need to adapt your objectives for each ability group of children and eventually, for each child. It is not expected that you reach all these objectives with every child. In addition, you will most likely have some children who are more advanced in some skill areas. For example, if a child knows the suggested colors or can count beyond 10, do not hesitate to introduce more colors and to proceed to more advanced counting skills with this child.

Sensory Skills

A. Visual Skills
  1. The ability to discriminate between the following conditions of light:
     a. light-dark
     b. lighter than-darker than
  2. The ability to discriminate likenesses and differences in color size, shape using real objects and pictures of real objects.
  3. The ability to perceive missing parts of objects and to identify the missing parts.
  4. The ability to assemble parts of an object to make a whole figure (whole-part-whole).

B. Auditory Skills
  1. The ability to discriminate between the following conditions of sound:
     a. loud-soft, noisy-quiet
     b. high-low
     c. fast-slow
  2. The ability to discriminate between and identify various sources of sounds:
     a. sounds in room
     b. sounds outside
     c. voices of children and teachers
  3. The ability to discriminate and reproduce the tunes of songs.
  4. The ability to discriminate and reproduce (clap, tap) the rhythm of a song.
  5. The ability to listen to simple stories.
  6. The ability to listen to and carry out simple directions.

C. Tactile - Kinesthetic Skills
  1. The ability to identify an object or a shape by touch alone.
  2. The ability to discriminate between different textures of objects.
  3. The ability to discriminate between different weights of objects.
  4. The ability to discriminate between different temperatures of objects and air.

D. Taste - Olfactory Skills
  1. The ability to identify familiar foods (solid and liquid) by taste alone.

2. The ability to discriminate between different qualities of foods-sweet, sour, bitter, salty.

Abstracting and Thinking Skills

A. Color Concepts
  1. The ability to match:
    a. red
    b. yellow
    c. blue
    d. orange
    e. green
    f. purple
  2. The ability to recognize and identify red, yellow, blue.
  3. The ability to recognize and identify orange, green, purple.

B. Shape Concepts
  1. The ability to match:
    a. circle
    b. square
    c. triangle
    d. rectangle
  2. The ability to recognize and identify circle, square, triangle, rectangle.
  3. The ability to reproduce a large circle.

C. Size Concepts
  1. The ability to recognize and identify instances of:
    1. small, smaller, smallest
    2. large, larger, largest
    3. short, shorter, shortest
    4. long, longer, longest
    5. thin
    6. fat

D. Number Concepts
  1. The ability to count objects up to 10.
  2. The ability to recognize and identify sets of one and two; one to five.
  3. The ability to reproduce (make) sets of one to five.
  4. The ability to compare sets of objects to determine which has "more members", "fewer member", the same number of members (one-to-one correspondence).

E. Position Concepts
  1. The ability to recognize and identify examples of the following positions:
    a. top-bottom
    b. high-low
    c. under, below - over, above
    d. front-back
    e. in, inside - out, outside
    f. at the side(s), beside
    g. between, in the middle

F. Auditory Concepts
  The ability to recognize and identify examples of the following:
    1. loud-soft
    2. high-low

G. Texture Concepts
The ability to recognize and identify the following:
a. hard - soft
b. smooth - rough
c. thick - thin

H. Temperature Concepts
The ability to recognize and identify examples of hot and cold.

I. Motion Concepts
The ability to recognize and identify examples of:
a. open - close, shut
b. walk
c. run
d. skip
e. hop
f. tap
g. clap
h. wiggle
i. up-down
j. in-out
k. stop-go
l. blink
m. wink
n. nod
o. lift, carry
p. climb
q. jump
r. crawl
s. twist
t. dance

J. Taste Concepts
The ability to recognize and identify examples of:
a. sweet - sour
b. bitter
c. salty

K. Time Concepts
The ability to recognize and identify concepts of day and night.

L. Age Concepts
The ability to recognize and identify examples of young and old.

M. Affective Concepts
The ability to identify and reproduce the facial expressions which illustrate:
a. happy (smile)
b. sad
c. angry, mad (frowns)

N. Association Skills
1. The ability to associate certain articles of clothing with people who wear them - boy, girl, man, woman.
2. The ability to associate certain articles of clothing with certain weather conditions - sunny, rainy, etc.
3. The ability to associate certain facial expressions with certain emotions.
4. The ability to associate body parts with their functions.

O. Classification Skills
The ability to classify clothing according to following categories:

    - a. clothes vs toys or food
    - b. boys' clothing vs girls' clothing
    - c. dress-up clothes vs play clothes
    - d. rainy-day clothes vs sunny-day clothes

P. Sequencing Skills
  1. The ability to repeat the words of songs and fingerplays in the correct order.
  2. The ability to reproduce the actions for songs or games in the correct order.
  3. The ability to recall the order of events of a simple story, of a demonstration activity, or of a field trip.

Response Skills

A. Verbal Response Skills
  1. The ability to verbalize spontaneously in a conversation. Emphasis upon verbal participation should be made during sharing time, snack and lunch periods. Activities provided by the teacher should be designed specifically to encourage spontaneous speech. Examples of such activities are:
     - a. dramatization
     - b. role play situations
     - c. use of telephones puppets
     - d. use of housekeeping center
     - e. use of study prints of familiar objects and situations
     - f. introduction of real objects for the children to manipulate and discuss
  2. The ability to learn and use new vocabulary words.
     - a. labels for parts of the body
     - b. labels for articles of clothing
     - c. same, different, alike
     - d. breathe, smell, taste, touch, feel, hear, see, grow
     - e. labels for concepts of color, shape, size, number, position, texture, temperature, motion, taste, time, age, affect
     - f. adult, child; male, female
  3. The ability to learn songs and poems and to repeat them with clear articulation.
  4. The ability to ask simple questions beginning with "who", "what" and "where".

B. Motor Response Skills
  The ability to manipulate paste, clay, primary crayon, large puzzle pieces and other manipulative materials such as Rig-A-Jig.

III. Sequenced Instructional Guide

(Unit Understanding with suggested activities and techniques for developing basic skills and unit concepts.)

UNIT UNDERSTANDING: A. Everybody has a name.

BASIC SKILLS TO BE DEVELOPED	INSTRUCTIONAL ACTIVITIES
SENSORY SKILLS Visual Skills Discrimination of printed name Auditory Skills Discrimination of spoken name ABSTRACTING SKILLS Concept Development Concept of self Association Skills A name with self A name with each child and teacher RESPONSE SKILLS Verbal Skills Identification of self, teachers, and children	1. Throughout the unit, emphasize each child's name in every possible way. Some suggested techniques are: a. Whenever you speak to a child, ask him a question, give him directions, or respond to his comments, use his first name. b. Encourage the children to refer to each other by name. c. Make each child a name tag to wear around his neck, for several days. This will help you to identify the child and will help the child understand that his name is important. d. Make a name tag for each child's chair and coat hook. This practice should be continued throughout the year to encourage the child to learn to recognize and later identify his printed name. e. Print each child's name on all his art and paper work. This should be done as the child watches or helps you hold the crayon. By continuing to do this all year, the child should be able to recognize the letters in his name and their order, and will probably attempt to reproduce his name by himself.

UNIT UNDERSTANDING: A. Everybody has a name.

BASIC SKILLS TO BE DEVELOPED	INSTRUCTIONAL ACTIVITIES
SENSORY SKILLS Auditory Skills Discrimination of spoken names of self, teachers, other children ABSTRACTING SKILLS Concept Development Concept of self Association Skills A name with self Names with each teacher and child RESPONSE SKILLS Verbal Skills Identification of self, teachers, and children	2. Talk to the children about your own name and the names of any other teachers or adults in the classroom. Emphasize the fact that everyone has a special name. Move around the group and ask each child "Who are you?" Encourage each one to give his first name. If any child does not give his name, you say, "This is __________." If any children share the same first name, draw this fact to the attention of the group. Indicate that there is a problem. Whenever you use the name, both (or more) children will respond. With the children, decide what you will call these children (using a middle name or last name) in order to identify each one. Teach the children the song "Where is Mary?" Sing the whole verse, indicating the lines that a child should sing. Select a child most likely to participate as a role model, and demonstrate the song for the group. Then move around the group, singing to each individual child, as all the children help sing the teacher's lines. The song can be sung often during the unit. As soon as the children are responding eagerly, ask individual children to assume the role of the teacher. This will help them learn to identify all the other children in the group.

UNIT UNDERSTANDING: A. Everybody has a name.

BASIC SKILLS TO BE DEVELOPED	INSTRUCTIONAL ACTIVITIES
SENSORY SKILLS Visual Skills Discrimination of objects in the pictures Auditory Skills Listening to the teacher as she tells the story ABSTRACTING SKILLS Concept Development Concept of a name Concept of self Sequencing Skills Recalling events of story in order RESPONSE SKILLS Verbal Skills Identification of objects in pictures and concepts in story Motor Skills Drawing	3. Read the book Maria, Everybody Has A Name to the children. This is the first time a book is used with the children in the group. Now is the time to introduce the word "book." Show the book. It has a front cover and a back cover--"just as you have skin to protect you." Call attention to the "title" or "name" of the book. Also note the picture of a little girl about the same age and size as the children in the room. Tell the children pictures can tell a story. The written words tell an even better story. This book should be "picture read." To picture read the teacher must be very familiar with the story. When picture reading to children hold the book so all children can see the pictures in the book. Then retell the story in sequence using the pictures in the book to illustrate each part of the story you tell. It is important to have eye contact with the children with whom you are sharing the story. The teacher must keep her face out of the book. The amount of the story you will include will depend upon the attention span of the children. If they seem restless quickly finish the story. Just before the end of the story ask "Do you think Maria will ever say her name?" If the children are responsive ask them why. Accept all answers. If children are not responsive continue the story. Evaluation: As a follow-up activity let the children use crayons and paper and draw one thing or one person from the story. As they draw encourage them to tell you about their picture and maybe other parts of the story.

UNIT UNDERSTANDING: B. The part of us that we see is called the body.

1. Each part of the body has a name.
2. The head has very special parts, each with a name.

BASIC SKILLS TO BE DEVELOPED

SENSORY SKILLS

Visual Skills
- Whole-part-whole relationships

Auditory Skills
- Listening to teacher as she names body parts

ABSTRACTING SKILLS

Concept Development
- Concept of body
- Concept of body parts
- Number concepts - one, two; one to five

RESPONSE SKILLS

Verbal Skills
- Identification of self and others
- Identification of body parts
- Identification of number sets
- Counting - one to five; one to ten

INSTRUCTIONAL ACTIVITIES

1. Using yourself and a child show the children what is meant by the label "body." Then focus on the basic parts--head, shoulders, arms, hands, chest, hips, legs, feet. Point to the head of the demonstration child, making sure to indicate whole head. Ask the children if anyone can name this part of the body. If no one gives the label "head," supply the label. Ask the children to repeat the word. Encourage the children to say, "That is a head, " or "That is _______'s head." Ask the child to find the same part on your body. Continue this procedure, moving from head to the feet. When all the basic parts have been covered, repeat the procedure for any of the parts which were unfamiliar to most of the children.

   Evaluation: Play a recognition game. Ask individual children to come to the front of the room and find a certain part of _______'s body. If any have difficulty, ask other children to assist. When the part is found, encourage the child to name it.

   When the children are familiar with the most basic body parts, introduce the labels for the smaller, more obscure parts--neck, elbows, wrists, fingers, fingernails, waist, abdomen, knees, ankles, toes, toenails, hair, skin.

BASIC SKILLS TO BE DEVELOPED	INSTRUCTIONAL ACTIVITIES
	1. (continued) Use the parts of the body, throughout the unit, to develop number concepts and relationships. For example, use the head, neck, chest, and abdomen as examples of sets of one. Use the arms, shoulders, hands, wrists, elbows, hips, legs, knees, ankles, and feet as examples of sets of two. Fingers and toes can be used for one-to-one counting from one to five, and eventually to ten.

SEQUENCING PRINCIPLES OF THE DARCEE CURRICULUM

	Initial		Terminal
Skill Sequencing	(gross discrimination	→	fine discrimination
	(simple task	→	complex task
	(concrete stimuli	→	abstract stimuli
	(perceptual-motor emphasis	→	conceptual-language emphasis
	(gross coordination	→	fine coordination
	individual materials	→	shared materials
	action-involved activities	→	more quiet, sedentary activities
	short activities	→	extended activities
	external reinforcement and control	→	internal reinforcement and control
	dependent on teacher direction	→	independent of teacher direction

A SAMPLE DAY

8:00-8:30	Arrival, Greeting and Bathroom (Friendly conversation, many questions from teacher. Discuss weather, observations on way to school, yesterday's activities, etc. ...)
8:30-9:00	Snack (A light meal, friendly conversation. Discuss the kind of subjects mentioned above. In addition, spend some time discussing the food - what it is, where it comes from, etc. ...)
9:00-9:20	A large group time (All of the children come together for singing songs, listening to a story, learning some new facts, playing a stand up, move-around game.) Example: "I'm So Glad I Came To School Today" Talk about "Willie the Weather Boy" - What kind of a day is it? What does Willie need to wear? Have children take turns putting on articles of clothing. Play "Loobey Loo" Game End of Large Group
9:25-9:45	Small group acitivity I (A small group of children, no more than six, work with one adult in a learning activity which the teacher starts, directs, and ends.) Example: Read a storybook, discuss the pictures, have the children remember the story and tell it back to you.
9:45-9:55	Bathroom and water
9:55-10:15	Small group activity II (Description same as small group activity I.) Example: A finger painting activity. Teacher talks to the children about colors, textures (like wet, dry, slippery, cool, etc...). She also assists the children in handling paper and paint. *Note: Practice this with grown-ups first before doing with children.
10:15-10:45	Outdoor play
10:45-10:55	Bathroom and water
10:55-11:00	Lunch Preparation This time may be made pleasant by playing soft non-disruptive music.

11:00-11:20 Lunch
(Pleasant conversation, review of the day's activities, etc. ... Children handle utensils as much as possible.)

11:20-11:30 Short Large Group Activity
(All of the children together)

Sing a song.
Briefly review the day.
Briefly "plan" for tomorrow (little children will not participate in this, a great deal, at first.)
Sing another song or do a fingerplay

END OF DAY

This is just a sample day. Many, many other activities can be done in a day. If the times allotted are not good for your situation, then change them, and allow more or less time as is needed. An all day program should include a nap, an afternoon snack and selected child-directed play opportunities.

A SAMPLE EVALUATION GUIDE FOR THE DAY

How do you feel about the day as a whole?

Did it go smoothly?

Did you feel comfortable about most of what went on?

Did you have enough time for each learning experience?

Were the children able to move quickly and smoothly into the next activity? (For example, from large group to small group; outside to inside, settling for lunch, etc. ...)

If not, how can you make these transitions more smooth?

Were there special behavior and/or learning problems today?

Were the activities appropriate in terms of interest and level of difficulty?

What do you think is happening with these children at home or at school which might be contributing to these problems?

How will you work on them?

What were your activities today?

Why? (objectives, concepts, skills)

What did you do that was brand new ... continuation ... review?

Did the children learn today ... which ones did, did not?

How do you know? (evaluation)

What would you have done differently?

What will you do tomorrow?

Why?

SAMPLE NEWSLETTER

EARLY TRAINING PROJECT

DECEMBER NEWSLETTER

ANNOUNCEMENTS:

The second group (Mrs. Outlaw's children) will have their regular monthly meeting on Saturday, December 7, at the usual time. The first group (Mrs. Horton's children) will have their meeting this month on Saturday, December 14. In addition, all the children in both groups will have a Christmas party together at the school at 11:00 A.M. on December 14. Our bus driver will come by before 11:00 A.M. that day to pick up the children in Mrs. Outlaw's group for the party.

SOMETHING TO DO TO HELP YOUR CHILD WHEN HE OR SHE GOES TO SCHOOL

"Something to read to your child" this month has a suggestion for parents. Also, we have enclosed a postcard. Your child can take his or her crayon and color it to make a Christmas card to send someone, and then take it to the post office to mail. If your child would like to make one for his or her home visitor, Mrs. Horton's address is .... and Mrs. Outlaw's is ....

SOMETHING TO READ ALOUD TO YOUR CHILD (A LETTER FROM MRS. HORTON)

Dear Boys and Girls,

Guess what? Martha Brown, one of the girls in the first training group, had a birthday last Wednesday, November 20th. She was five years old. The postman—or mailman, as we sometimes call him—brought Martha a large package. Martha wanted to know how the package had come all the way from another city to her home. She asked the postman what happens to letters and packages after they are mailed. Martha's mother decided to take

WORK WITH PARENTS

her to visit the post office. Martha and her mother saw many things, letters being dropped in the letter slot, packages being processed for mailing; in fact, Martha took a tour through the post office. She enjoyed it so very much that she wants you to write your letters to Santa Claus, then ask your mother to take you to the post office to see how your letter is mailed. While there, if you ask the clerk to show you around, perhaps he will.

Overview of the DARCEE Home Visiting Program

Goals for the Child What does the child need?	Goals for the Mother What will the mother do to meet the child's need?	Home Visitor Role How will the home visitor help the mother meet hers and the child's need?
I. The child develops skills which will help him learn.	I. The mother provides and organizes experiences and objects which help the child develop skills. She interacts with the child.	I. The home visitor shows the mother how daily experiences and household objects can be used to help the child develop skills. She shows the mother ways of interacting with the child.
A. The child will be able to see, hear, smell, taste, and touch things that are alike and different. He will be able to use	A. The mother provides and organizes experiences which help the child learn to use his senses.	A. The home visitor shows the mother appropriate experiences and objects which help the child learn to use his senses. She shows the mother how to use these experiences and objects.
1. eyes to see	1. She will show him things that have differences he can see such as colors, shapes, sizes, and number. She will talk about how they are alike and different.	[illegible] will help the mother to be able to see and carefully observe something.
2. ears to hear	2. She will talk to the child to help him provide objects which make different sounds (i.e., loud and soft; high and low).	2. She will help the mother to be able to focus her attention on something.

3. nose to smell 4. mouth to taste 5. hands to touch	3,4,5. She will talk with the child about what he is smelling, tasting, or touching. She will provide objects which have differences in smell, taste, and touch. Differences which might be included are smells-smoke, flower scents, spice; tastes-sour, sweet, and bitter; and touch-soft, hard, smooth, and rough.	3,4,5. She will provide experiences and objects which help the mother to use her senses so she can see, hear, smell, and touch likenesses and differences.
B. The child will be able to organize and order the things he has learned through his eyes, ears, nose, mouth, and hands.	B. The mother will provide and organize experiences which help the child organize his thinking.	B. The home visitor helps the mother organize space and time in the home. She shows the mother appropriate experiences and objects to use (and how to use them) to help the child develop abstract thinking skills.
1. He will be able to understand concepts or big ideas such as colors, number, size, position, temperature, tastes, odors, time, age, etc.	1. She will show him things and guide him through experiences in which the child will be involved with many different objects which have color, number, size, position, temperature, taste, odor, time, age, etc.	1. She provides experiences for the mother which will help her to be able to grasp the major concepts about things. She develops and uses units to organize major concepts which she wants the mother and child to learn.

2. He will be able to associate things or put things together which go together.	2,3. She will provide objects which will give the child practice in putting things together which go together and putting things in groups.	2,3. She provides opportunities for the mother to take situations apart (analyze them) and judge situations (evaluate them). She guides the mother in problem solving situations.
3. He will be able to classify or put things which go together in groups.		
4. He will be able to sequence things or put things in place following a special order.	4. She will provide daily experience in sequencing for the child by ordering the things and events in his life.	4. She involves the mother in the process of sequencing experiences for the child. She provides experience in sequencing for the mother by ordering the things and events in the home visiting program.
C. The child will be able to do things with the learning he has organized and ordered.	C. The mother will provide and organize experiences and objects which give the child opportunities to talk and do things with his body.	C. The home visitor shows the mother how to help her child learn to talk more easily and clearly; how to do things with his body.
1. He will be able to talk about what he has learned.	1. She will talk often to the child in a way to help him pay attention to what she says. She will listen carefully to the child when he talks.	1. She talks carefully with the mother and child because she sets an example of the way she wants them to talk. She listens carefully to the mother and child.

a. He will be able to talk with ease.	a. She will show the child how to talk with ease by using her own fluency of speech.	a. She provides experiences and times which give the mother and child opportunities to talk.
(1) He will say words to name or label people and things around him.	(1) She will name or label people and things for the child at first so he will hear specific names. She will ask questions that encourage him to say names.	(1) She names or labels people, things, and experiences when they are introduced to the mother to increase the number of specific words the mother hears.
(2) He will say words that tell what he is doing or what he has done.	(2) She will describe what the child is doing or what he has done.	(2) She uses action words to describe what she and other people are doing or have done.
(3) He will say words that describe people and things.	(3) She will use words that tell about people and things so the child will hear her.	(3) She uses adjectives to describe people, things, and experiences.
(4) He will say words that tell where people and things are.	(4) She will use words that tell where people and things are so the child will hear her.	(4) She uses position words such as in, out, on, there, here, on top of, beside, in front of, in back of, and under.

b. He will be able to say words clearly and carefully.	b. She will speak clearly and carefully to the child and will encourage him to carefully articulate what he says.	b. She speaks clearly and carefully for the mother and child and encourages them to carefully articulate what they say.
c. He will be able to put words together.	c. She will use phrases and complete sentences in her conversation with the child and other people.	c. She uses phrases & complete sentences in her conversation.
(1) He will say small groups of words or phrases.	(1) She will ask the child questions which encourage him to use phrases.	(1),(2) She reminds the mother to use phrases, complete sentences and various ways of talking to the child.
(2) He will say complete sentences and will use various types of sentences such as statements and questions.	(2) She will praise the child for speaking in complete sentences when he is ready to use larger groups of words.	
2. He will be able to do things with his body.	2. She will provide objects and space which help the child use his body.	2. She suggests to the mother and shows her experiences and objects which will help the child use his small and large muscles.

a. He will be able to use his small muscles to hold and carry things and to cut, paste, paint, color, draw, and lace in order to use his hands, fingers, and eyes together in many ways.	a. She will provide toys, scissors, paste, paint, crayons, paper, strings, and other materials for the child.	a. She provides opportunities for the mother to use her small muscles such as sewing or preparing instructional materials for the child.
b. He will be able to use his large muscles in his arms, hands, legs, and feet in order to walk, run, push, pull, swing, jump, throw, catch, skip, and ride wheel toys.	b. She will provide safe indoor and outdoor play space for the child which will allow him to walk, run, jump, and play with toys.	b. She helps the mother organize safe play areas. She shows her how to make large toys from household articles such as boxes, boards, and rope.
II. The child develops attitudes about himself, other people, things, and experiences which help him learn.	II. The mother develops attitudes which help her be a better teacher for her child.	II. The home visitor sets an example for all the attitudes she wants to help the mother and child develop.
A. The child will feel good about himself and feel that he is an important person.	A. The mother will show the child that she feels good about herself and about him. By including him in family activities and calling him by his name she will help him feel important at home.	A. The home visitor provides experiences which help the mother and child feel good about themselves. She conducts many activities with the mother and child which help them know themselves.

B. The child will feel that he can do things.	B. The mother will provide activities which the child can do successfully but which keep the child reaching up. She tells him when he does something well.	B. The home visitor praises the mother and child for the things they can do well.
C. The child will trust other people.	C. The mother will do things with the child in a careful way so he will trust her first. She will provide opportunities for the child to be with other children and adults.	C. The home visitor does things with the mother and child in a careful way so they will develop trust in her. She provides opportunities for the mother to do things with other mothers and many other people.
D. The child will feel that learning is fun and will want to find about things.	D. The mother will present experiences and objects to the child in an enthusiastic manner. She will provide activities which help the child explore things and be curious about things. She will introduce school-type materials to the child.	D. The home visitor shows the mother how to present experiences and objects to the child in an enthusiastic manner. She provides experiences which help the mother use her curiosity.
E. The child will be able to do things by himself with continually less help from others.	E. The mother will provide objects and experiences which permit the child to work by himself. She will praise him for doing more for himself.	E. The home visitor shows the mother how to help the child work independently. She helps the mother to be able to function independently.

F. The child will be able to stay with a task until it is done.	F. The mother will provide objects and experiences which require the child to persist in order to complete them.	F. The home visitor persists in all her activities until she has done what she intended to do. She suggests to the mother and shows her how to use materials and experiences to help the child persist.
G. The child will be able to wait for a reward.	G. The mother will provide opportunities which require the child to wait. She will encourage him to take turns doing things with other people. She will give the child rewards after he has waited.	G. The home visitor provides situations which require the mother to wait for a reward. She gives rewards to the mother. She makes suggestions to the mother about ways to manage her money that require delay of gratification.

TABLE I

LAYOUT OF GENERAL RESEARCH DESIGN

Treatments	T_1 Three Summer Schools	T_2 Two Summer Schools	T_3 Local Controls	T_4 Distal Controls
First Winter 1961-62	(Criterion development, curriculum planning, general tooling up)			
First Summer 1962	Pre-test Summer School Post-test	Pre-test Post-test	Pre-test Post-test	Pre-test Post-test
Second Winter 1962-63	Home Visitor Contacts			
Second Summer 1963	Pre-test Summer School Post-test	Pre-test Summer School Post-test	Pre-test Post-test	Pre-test Post-test
Third Winter 1963-64	Home visitor Contacts	Home visitor Contacts		
Third Summer 1964	Pre-test Summer School Post-test	Pre-test Summer School Post-test	Pre-test Post-test	Pre-test Post-test
Fourth Winter 1964-65	Home visitor Contacts	Home visitor Contacts		
Fourth Summer 1965	Follow-up Tests	Follow-up Tests	Follow-up Tests	Follow-up Tests
Fifth Summer 1966	Follow-up Tests	Follow-up Tests	Follow-up Tests	Follow-up Tests
Seventh Summer 1968	Follow-up Tests	Follow-up Tests	Follow-up Tests	Follow-up Tests

THE RESPONSIVE MODEL PROGRAM

Supplementary Material

A Tentative List of Problem-Solving Processes, reprinted from G. Nimnicht, B. P. Barnes, et al., "Objectives of the Responsive Head Start and Follow Through Program," mimeograph, Far West Laboratory for Educational Research and Development, 1971, pp. 6-14.

A TENTATIVE LIST OF PROBLEM-SOLVING PROCESSES

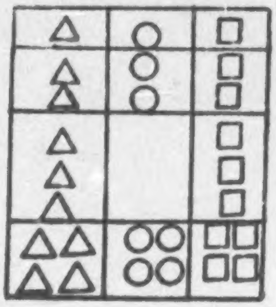
NON-INTERACTIONAL PROBLEMS

1. Recognizes, extends, and discovers rules from examples (inductive reasoning).

Examples:

(a) Recognizing, completing, extending, and discovering patterns in one direction. For example: The child sees colored squares of the same size in a sequence of red, blue, yellow, red, blue, ____ and recognizes that a yellow square comes next. Or, the child sees △ ▭ ○ ______ ▭ ○ and recognizes that a △ goes in the blank space.

(b) Recognizing, completing, extending, and discovering patterns in two directions (matrices or multiplicative classification). For example: The child says or recognizes that ○○○ goes in the empty cell in the matrix.



△	○	□
△△	○○	□□
△△△		□□□
△△△△	○○○○	□□□□

Figure 1. Sample Matrix Problem with Intersecting Classifications

(c) Figures out rule in a "What's the Rule" game by giving an example based on the rule. For example, if the child sees boy change to boys, book to books, and house to houses, he can change dog to dogs. If he sees a "machine" change yellow, blue, green, orange, black, white, brown or any not-red color into red, he can predict what the "machine" (usually a box the teacher puts things into and then takes something out of) will do to any not-red object. Piaget's conservation, classification, and seriation tasks recommend many such "rules."

2. Reasons deductively

Examples: Produces own versions of inductive games.

(a) Given rule for a pattern, predicts which item will come next or extends pattern.

(b) Given rules (attribute cells) for a matrix, completes the cells of the matrix.

(c) Makes own rules for "What's the Rule" games.

3. Changes or breaks set, recognizes fixation, adapts to games involving rule changes.

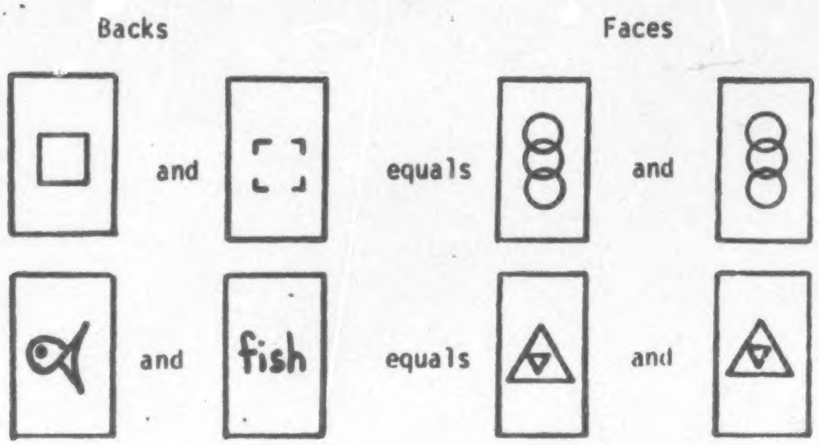
(a) Adapts to new phases in Learning Booth; for example, discovers how to play Phase II games (searching and matching) after learning how to play in Phase I (free exploration).

(b) Adapts to new ways of playing matrix games; for example, from vertical and horizontal intersecting patterns to L-to-R and top-to-bottom patterns (compare Figures 1 and 2).

1	3	5
7	9	
13	15	17

Figure 2. Sample Matrix problem with left-to-right and top-to-bottom pattern (11 goes in the empty cell)

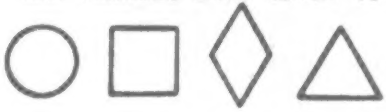
(c) Adapts to new rules when playing a Memory or Concentration card game; for example, pairs of cards with matching designs are shuffled and laid out face down. Children can find the pairs by playing Concentration; that is, remembering where the mate to a design is located. They can also discover that associations on the backs of the cards tell them which cards are matched pairs. The backs of the cards are organized according to a rule. For example, the rule might be solid line figures match broken line figures or words might match pictures.



Each new set of cards involves a new rule for paired associates on the back.

4. Eliminates what is known to determine what is unknown.

Example: Given two or more stimuli that he knows and one he doesn't know, child can identify the unknown. For example, shown a picture of a square, triangle, circle - shapes he knows - and a picture of a rhombus - a shape he doesn't know - a child points to the rhombus when asked to.



5. Uses feedback productively; uses information; willing to guess, takes risks; hypothesizes or forms reasons for his behavior.

   Example: Modifies guess about what comes next in a pattern. If a child's guesses get closer to the attributes of the pattern, there is evidence of using feedback. If his first guess is relevant to the single item shown, he is willing to guess, take risks, and use information. For example, if this is the pattern he's seen:

   a bb ccc

   and he guesses that four "d's" will be next (a "good" guess) but one "d" is next:

   a bb ccc d

   Will he now modify his next guess to two "e's?" (The pattern is alphabetic order plus 1,2,3, 1,2,3, etc.) This would be using feedback productively. If, after seeing only the "a" in the above pattern, the child guesses "b" is next, he is demonstrating a willingness to guess, take a risk, and to use information. In both examples, you may infer that the child is hypothesizing or forming reasons for his behavior.

6. Takes different points of view.

   Examples:

   (a) Takes role of teacher after taking part in activity.

   (b) Improvises appropriately when role-playing; can act as if he were a tree, policeman, etc.

   (c) Rotates stimulus card in embedded figures task (or rotates himself around card); physically, takes a different perspective with regard to the stimulus.

(d) Also indicated by flexibility and variety of responses to a stimulus (Rorschach or TAT) or stimulus situation (Dog and Bone Test).

7. Solves verbal and mathematical problems that are "less than obvious."

   (a) Writes or dictates a sentence based on a numerical headline. For example, if headline is 1 2 3, writes sentence, "One boy and two girls makes three problems."

   (b) Verbalizes rules, patterns, concepts in inductive games.

   (c) Given a set of numbers, makes a variety of number sentences with them.

   (d) Given a set of words, makes a variety of sentences with them.

8. Recognizes that a problem can not be solved.

   Example: Given an impossible task (telling color by touch), the child will either give up on the task (refuse an invitation to continue playing, walk away, say he wants to play a different game or doesn't want to play) or say, "You can't tell color with your fingers."

9. Transforms input in one sense into output in another sense; codes and maps.

   Examples:

   (a) Shown a shape, the child can then reach into a bag and tell that shape from others by touch.

   (b) Blindfolded and handed a shape to feel, the child can then point out by eye the felt shape in a group of shapes shown to him.

(c) Shown a card with two dots and a dash (.. ___), the child can tell by ear the associated sound (di-di-dah) or can say di-di-dah.

(d) Given a sound stimulus (di-di-dah), the child can tell it by eye or can write it out (.. ___).

Tasks c and d are also clear examples of coding.

10. Understands reversibility; works backward, thinks laterally.

Examples:

(a) Clear examples are substraction as the reverse of addition and division as the reverse of multiplication.

(b) All inductive games foster Hypothesizing; for example, if a rule in a "What's the Rule" game is any not-red cube is changed into a red cube, this is extremely easy, grasped by nearly all kindergarteners after no more than four examples. However, the reverse operation - red becomes not-red - is extremely difficult for kindergarteners.

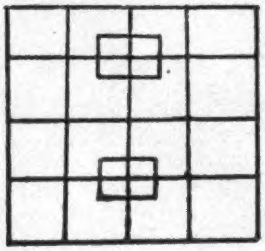
(c) Given an answer can think up a question for it.

11. Recognizes and produces embedded figures.

Examples:

(a) Recognizes letters and other figures in scribble drawings.

(b) Recognizes figures confused by intersecting lines, shared boundaries or camouflage. For example, how many squares in this figure?



(c) Recognizes figures presented in unfamiliar or unexpected orientation or context; e.g. cow upside down in a tree.

(d) Recognizes figures (words) hidden inside other figures (or inside word, for example).

(e) Names figures perceived in an abstract picture.

(f) Given figures, hides them in one or more of above ways.

INTERACTIONAL PROBLEMS

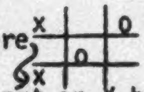
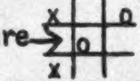
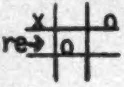
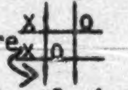
1. Changes or breaks set, recognizes fixation, adapts to games involving rule changes.

Examples:

(a) Responds appropriately to opponent's unanticipated move in checkers, chess or other game or activity.

(b) Improvises appropriately while role-playing with one or more others.

2. Conceptualizes probable responses to alternative actions (hypothesizes).

Example: If I put an X here , opponent will probably put an 0 here . If I put an X here  opponent will probably put an 0 here  and win.

3. Takes different points of view.

Examples:

(a) If he puts his right hand in hot water, his left hand in ice water, and then puts both his hands in lukewarm water and feels the relative difference - right hand feels cool, left hand feels hot - the child will then be asked to imagine his right hand belonged to someone else who said, "This water is cool." The child indicates that "Where you've been influences what you feel."

(b) Takes different roles in dramatic play.

4. Other non-interactional abilities related to interactional abilities include: reasoning inductively and deductively, using information, and forming reasons for behavior.

EMOTIONAL PROBLEMS

1. Copes with others' emotions.

   Examples:

   (a) Expresses pleasure at others' joy.

   (b) Accepts others' expression of anger or displeasure.

   (c) Sensitive to others' feelings; does not demean.

   (d) When aware of cheating or gloating, applies this scale: ignores, then points out matter-of-factly, then expresses anger or dissappointment acceptably. Does not persist in ignoring (ostrich strategy); does not "tattle."

2. Copes with own emotions.

   Examples:

   (a) Expresses joy, delight.

   (b) Expresses anger or displeasure appropriately.

   (c) Acknowledges own rule-breaking when it is pointed out and continues playing.

   (d) Takes credit and responsibility; accepts compliments and criticism.

3. Has healthy self-concept (See pages 2 - 3).

GENERAL CHARACTERISTICS OF A GOOD PROBLEM-SOLVER APPLY TO MANY ALTHOUGH NOT ALL PROBLEMS.

1. Able to concentrate: not easily distracted; perseveres.

2. Able to learn incidentally, take a dual focus (singing along

with group while solving a puzzle is an example; another is 3 (c) on page 7).

3. Independent, autonomous, self-directing, prefers to "do it himself," but not stubborn; does not perseverate.
4. Asks questions requiring extended answers ("How," "Why," "What would happen if" questions).
5. Confident; has conviction; not easily persuaded to change a right answer.
6. Inventive, fluent, makes many and varied associations.
7. Imaginative (for example, free associations to words are one or more standard deviations from the mean).
8. Reflective, focused; not impulsive (for example, in tasks that ask"Which one is most like the letter d?"b p h q, delays ("thinks") before responding).
9. Able to tolerate reasonable delay; waits turn.
10. Flexible, open, holds judgments in suspension pending further information (related to changing set).
11. Able to work within limitations.
12. Able to use a variety of resources to solve problems - adults, peers, materials, equipment.
13. Seeks challenge; withstands stress (seeking a problem is seeking stress, risk, challenge).
14. Senses dissonance or notes discrepancies (problem-sensing). Tasks that ask"Which one doesn't belong?"(a a a c a) are simple examples.
15. Deals with abstractions (concepts, symbols).
16. Plans and carries out projects.
17. Makes and honors bargains, agreements and contracts.

THE PRIMARY EDUCATION PROJECT

Supplementary Materials

L. B. Resnick, *Skills for Inclusion in an Early Learning Curriculum*, reprinted from L. B. Resnick, Design of an Early Learning Curriculum, (Pittsburgh: Learning Reasearch & Development Center, University of Pittsburgh, 1967), pp. 20-42.

J. D. Kaplan & L. B. Resnick, *Curriculum Sequences for Number Conservation*, reprinted from L. B. Resnick, Design of an Early Learning Curriculum, (Pittsburgh: Learning Research & Development Center, University of Pittsburgh, 1967) pp. 51-54.

SKILLS FOR INCLUSION IN AN EARLY LEARNING CURRICULUM

INDIVIDUALIZED/PEP

1. Orienting and Attending Skills

1.0 Attention span. The child can work at a given task for increasingly extended periods of time.

2.0 Focussing attention. The child can discover and attend to relevant aspects of a stimulus.

3.0 Task completion. The child normally completes a task before moving on to another one.

4.0 Persistence. The child can continue working at a task even in the face of distraction or frustration.

5.0 Impulse control. The child can:
  5.1 wait for instruction on how to proceed
  5.2 wait for his turn to respond
  5.3 refrain from handling materials that are not intended for his use

6.0 Delay and character of rewards.
  6.1 The child will work for a reward that does not come immediately upon task completion.
  6.2 The child will work for "abstract" rather than "concrete" rewards -- e.g., verbal praise, "points," etc.
  6.3 The child is increasingly rewarded by the pleasure of doing and completing the task itself (i.e. by "intrinsic reinforcements").

7.0 Self-confidence.
  7.1 The child will try a new task, even when there is risk of not succeeding.
  7.2 A single failure does not cause the child to cease working at a task.

8.0 Direction-following. The child can follow instructions on how to perform a task (see Language Skills I and II).

9.0 Competition. The child can:
  9.1 compete with others in simple games and find reward in "winning"
  9.2 compete with himself, in the sense of trying to pass a previously set standard

10.0 Social skills. The child can:
  10.1 work with other children on a task
  10.2 ask for help from other children or teacher
  10.3 give help when asked

2. Gross Motor Skills

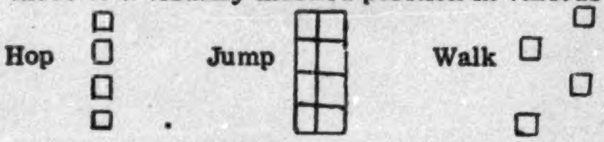
These are the skills that indicate a child's ability to use his body efficiently and move comfortably in his environment.

1.0 Basic forms of movement. The child can:
- 1.1 walk at various rates, at an even pace
- 1.2 jump, landing simultaneously on both feet
- 1.3 hop, on either foot
- 1.4 skip, gallop, run, etc.

2.0 Elaborated forms of movement. The child can walk, jump, hop, etc.
- 2.1 backward
- 2.2 sideways
- 2.3 at various rates
- 2.4 high and low
- 2.5 in one-half and quarter turns
- 2.6 etc.

3.0 Alternation of sides of body. The child can:
- 3.1 climb stairs, using alternation pattern, at an even pace
- 3.2 beat out simple rhythms alternately with right and left hands (or feet)

4.0 Directional movement. The child can:
- 4.1 move to a visually marked position in various patterns; e.g.,



- 4.2 move in a verbally described direction (e.g., "high," "low," "forward," "backward")

5.0 Body control.
- 5.1 Given a path defined by two rows of benches (later, lines on the floor), child can move along the path without touching sides.
- 5.2 Given ten pins set up with some space between them, child can walk through them without knocking them over.
- 5.3 Given an obstacle course involving climbing, crawling, and other movements, the child can:
  - 5.3.1 move through it, performing the same movements as a "leader"
  - 5.3.2 move through it following verbal directions

6.0 Balance.
- 6.1 The child can balance on his toes, on one or both feet.
- 6.2 While balancing on one foot, the child can raise or swing his other foot.
- 6.3 Given a balance beam, the child can move forward, backward, sideways, with eyes open or closed, while carrying things, etc.

Gross Motor Skills - Continued

7.0 Aim. The child can:
  7.1 throw (roll, kick, bat, punch) a ball or beanbag to increasingly narrow visual targets in various positions in relation to his body
  7.2 throw (etc.) ball to a verbally described position (e.g. "near," "far," "in front of you," "next to the desk," "under the table")

3. Positioning Skills

These are skills that develop the child's awareness of his own body and its position in space.

1.0 Parts of his own body. The child can:
  1.1 move various parts of his body independently (or in combination) following the leader, and later on verbal command
  1.2 when teacher points to part of body on a doll or picture, touch same part of his own body
  1.3 touch various parts of his body on verbal command; later name them
  1.4 adopt a pose from a model (or a picture)

2.0 Parts of the body - general. The child can:
  2.1 assemble a person or face from cut-out pieces, and name parts
  2.2 complete a drawing of a person or face

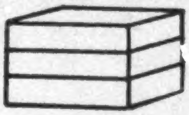
3.0 Right-left discrimination. The child can:
  3.1 identify his own right and left hand and foot
  3.2 turn to the right or left upon command
  3.3 identify the right or left hand (foot) on another person, in various positions in relation to child
  3.4 given two objects placed before him, identify the right-hand (left-hand) objects
  3.5 given two objects placed before him, state which objects would be on right (left) if he were on the other side

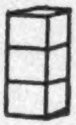
4.0 Path-following.
  4.1 Given a path with various branches, drawn on the floor, and with visual markers at certain points, the child can:
    4.1.1 move along the path to a given marker (visually presented), or past a series of markers
    4.1.2 move along the path to a point specified verbally
  4.2 Given a two-dimensional model or a map with pathways marked, the child can trace a path with finger, to a visual marker or to place specified verbally.
  4.3 Given a matrix drawn on the floor, the child can walk across rows, up and down columns, etc., according to visual patterns and verbal instructions.

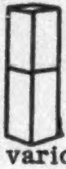
4. Fine Motor Skills

These are the manipulative skills required for good performance in other parts of the curriculum.

1.0 Stacking objects. The child can build a tower, first with flat blocks, then with cubes, finally with rectangular blocks.







2.0 Placing objects. The child can place objects of various shapes into correspondingly shaped holes, and later onto drawings of the same size and shape as the object.

3.0 Alignment. The child can:
- 3.1 line up blocks or cards in "trains "
- 3.2 place two rods so that marks on each of them are lined up
- 3.3 place a rod so that one end is at a mark on a piece of paper
- 3.4 set a dial to a premarked position

4.0 Fasteners and locks. The child can operate:
- 4.1 buttons
- 4.2 zippers
- 4.3 snaps
- 4.4 key locks
- 4.5 combination locks (simplified)
- 4.6 door knobs
- 4.7 screw-top jars
- 4.8 etc.

5.0 Tools. The child can use:
- 5.1 a hammer, first on pegs, later on small nails
- 5.2 pliers
- 5.3 a screwdriver
- 5.4 wrench
- 5.5 nuts and bolts
- 5.6 etc.

6.0 Pouring. The child can pour rice (or other gross material) then sand, then water
- 6.1 from and into variously shaped containers
- 6.2 up to a marked line

7.0 Drawing and writing. The child can:
- 7.1 hold and use a crayon, then a pencil, comfortably
- 7.2 draw a line,staying inside the boundaries of a path
- 7.3 trace, using stencil cutouts

Fine Motor Skills - Continued

- 7.4 trace a drawing
- 7.5 copy simple patterns or letters
- 7.6 fill in between lines

8.0 Threading. The child can:
  - 8.1 thread a rigid object onto a rigid pole
  - 8.2 thread an object with two or more holes onto two or more appropriately placed poles
  - 8.3 thread a rigid object onto flexible wire
  - 8.4 string beads
  - 8.5 complete a punched sewing card, alternating direction (i.e., start from above, then from below, etc.)
  - 8.6 lace shoes

9.0 Hand co-ordination. The child can:
  - 9.1 use one hand to hold an object in place while the other works (as in hammering, drawing)
  - 9.2 alternate use of hands in simple tasks
  - 9.3 use hands independently or together as appropriate

5. Sensory Skills

These skills involve the sense of sight, hearing and touch in various combinations. They require the child to make the sensory discriminations that underlie virtually all conceptual functioning.

- **1.0 Visual Discrimination**
  - **1.1 Discrimination of shape; e. g., given an array of plane or solid figures, the child selects the one that matches a model. The array may be different in size, color and material from the model; and discriminations will become progressively finer as the child's skill develops.**
  - **1.2 Discrimination of color. Given an array of colored objects, the child selects one that exactly matches a sample.**
  - **1.3 Discrimination of size in one, two, and three dimensions. Given an array of sticks of various lengths, circles of various diameters, or solid geometric figures, the child selects the one that is the same size as a model. Eventually the child should be able to select the matching item with very little trial and error.**
  - **1.4 Discrimination of position and orientation. Given several objects arranged in a pattern, select another set of the same objects arranged in exactly the same position. Or, given a sample drawing plus examples of the same drawing in other positions (including "reversals" and "mirror images"), select the example that matches the sample.**
  - **1.5 Recognition of representations. Given an array of objects and an array of pictures of those objects, in various perspectives, child can match pictures with corresponding objects.**

- **2.0 Auditory Discrimination**
  - **2.1 Discrimination of pitch. Given two tones, child can identify the higher (or lower) one. Or, given a tone, child can match it (e. g. by finding a tone bell or a step on a xylophone that is the same).**
  - **2.2 Discrimination of sound-intensity. Given two sounds, the child can state which is louder (or softer).**
  - **2.3 Discrimination among types (i. e. sources) of sounds. Given a sound, child can state what is producing the sound. Or, child can identify a sound that is the same as a sample. This can involve discrimination between different musical instruments, or between other sources of sound (e. g. table being moved, water running, pots being washed, etc.)**
  - **2.4 Discrimination of direction and distance of sounds. A pitch-pipe is blown or someone moves and the child, blindfolded, can tell in what part of room the sound was made.**
  - **2.5 Discrimination of duration of sound. Give two continuous sounds, presented simultaneously or successively, the child can state which one lasted longer.**

Sensory Skills -Continued

2.6 Discrimination and production of rhythmic patterns. Child can match and copy rhythmic patterns of various kinds. Also, child can label different types of rhythmic patterns (fast-slow; regular-irregular; syncopation; waltz-time, etc.)

2.7 Discrimination and production of stress (beat) patterns in speech and in music; e.g., child can state which note is accented in a rhythmic pattern, or child can repeat a line of poetry accenting different words.

3.0 Tactile Discrimination

3.1 Discrimination of textures. Given an array of fabric samples, child pairs identical samples while blindfolded.

3.2 Discrimination of shape. Blindfolded, the child matches plane and solid geometric figures, or completes a simple inset puzzle.

3.3 Identification of objects on the basis of touch. Blindfolded, child names a number of objects in front of him, or moves about the room describing where he is.

3.4 Discrimination of temperature. Given two glasses of water of different temperatures, child states which is warmer, which colder.

4.0 Cross-modal Discrimination. E.g., given an array of objects which the child can touch but not see, and another arry which he can see but not touch, child matches objects.

6. Classification Skills

All individuals respond to objects and events as members of classes or categories of similar events. This is necessary merely to exist and maneuver in a complicated environment. When this classification can be performed and recorded systematically, a tool of enormous intellectual power has been acquired. The skills listed here are all involved in systematic classification behavior.

1.0 One-dimensional sorting, without noisy attributes. Given an array of objects which differ in only one attribute (e.g. color or function or texture, etc.) sort them into separate categories on the basis of that attribute.

2.0 One-dimensional sorting, with noisy attributes. Given an array of objects which differ in more than one attribute (e.g. shape, size and color), sort on the basis of any one of those attributes. Then resort the entire array on the basis of a different attribute with given and self-selected attributes.

3.0 Sorting to form conjuctive classes. Given an array of objects which differ in several attributes, sort on the basis of co-occurrence of two attributes at a time (e.g. small blue objects form class A; large red objects form class B, etc.)

4.0 Two dimensional sorting, with and without noisy attributes. Given an array of objects which differ in at least two dimensions; sort in a matrix format, using two dimensions, e.g. by color and shape.

5.0 Three-dimensional sorting, with and without noisy attributes. Given an array of objects which differ in at least three-dimensions; sort in a three-dimensional matrix format, using three dimensions (format would resemble three-dimensional tic tac toe game).

6.0 Using matrices to locate relevant examples. Having sorted in a two or three-dimensional matrix form, quickly pick out objects described.

7.0 Hierarchical sorting. Given an array of items which differ in several dimensions; sort on one dimension. Then take each class and sort it, separately from the other classes, on a second dimension.

8.0 Sorting to form disjunctive classes. Given an array of objects which differ in several attributes, sort on the basis of occurrence of one or the other of two attributes (e.g. if either blue or small, object belongs in class A; if either large or red, belongs in class B).

Classification Skills-Continued

9.0 Using verbal description to guide classification. Given a verbal description of a class or several classes, sort an array of objects into the described classes.

10.0 Giving verbal descriptions of classification systems. Given an array of objects sorted into several classes, describe the bases of classification.

11.0 Select dimensions for sorting. In each of the problems above, the child chooses the dimensions on which he will classify and then sorts or describes the system (as opposed to having the teacher set the categories or dimensions).

7. Skills in Using Examples

Examples are used in almost all teaching, as a means of defining concepts or as models for children to match or copy. Yet many children do not know how to learn from examples. The skills below are among those that will permit children to use examples effectively. They are, of course, closely related to classification skills.

1.0 Same-different discrimination. Given two objects or pictures, state whether they are identical or not identical.

2.0 Matching to sample, with no noisy attributes. Given a model (e.g., large red circle) select from an array another item that is exactly the same (large red circle).

3.0 Matching to sample, with noisy attributes. Given a model (e.g., large red circle) select from an array another item that is the same in one specified dimension, ignoring the other dimensions (e.g., small blue circle; or large green circle, etc.)

4.0 Oddity problem. Given an array of objects, select the one that is different from all the others; or different from a sample. This may be done with and without noisy attributes.

5.0 Compare and contrast. Given two non-identical examples, state how they are the same and how they are different.

6.0 Extracting common properties of an array. Given a set of non-identical examples, state what they all have in common.

7.0 Scanning for the basis of discrimination. Given two classes of examples, state how the two classes differ.

8.0 Selecting relevant examples for a particular problem. Given a problem (e.g., "Are all green items the same weight?") select from an array the examples that should be studied.

8. Spatial and Locational Skills

Building on awareness of his own body, these are skills which permit the child to visualize and describe spatial relations, and to use models and maps for planning and direction.

1.0 Locating points in the real environment (cf. Positioning Skills). The child can:
- **1.1 Describe a location by stating what objects are there; also, find a location so described**
- **1.2 Describe a location by stating positional relation to other objects (near, above, below, left of, etc.); also, find location so described**
- **1.3 Follow a described route, passing designated places in designated order; also, describe a route a person has followed**
- **1.4 Name all points that would be passed in a given route (from x to y)**

2.0 Using a three-dimensional model. The child can:
- **2.1 Perform each of the behaviors in 1.0 using a three-dimensional model of the space**
- **2.2 Relate three-dimensional model of space to real space by:**
  - **2.2.1 placing a doll at the point in the model where a real person is standing (or vice-versa)**
  - **2.2.2 naming and pointing to objects in model that corresponds to real space**
  - **2.2.3 arranging model furniture, etc. to correspond to real-space arrangement**

3.0 Using a two dimensional map. The child can:
- **3.1 Perform each of the behaviors in 1.0 using a two-dimensional map**
- **3.2 Relate two-dimensional drawing to three-dimensional model and to real space in the ways listed in 2.2**

4.0 Perspective and distortion. The child can:
- **4.1 Estimate relative size and distance of two objects in various perspectives (e.g. both large, one close and one far; one large and one small, both far) etc**
- **4.2 Given views of objects from various orientations (front, back, side, top, bottom, various angles, and distances, etc.) identify which are the same object, which are different (i.e. "object conservation")**

Spatial and Locational Skills-Continued

4.3 Discriminate mirror from direct images and reversal from non-reversal patterns
4.4 Predict distortion of objects in different types of mirrors and projections. Also, recognize objects so distorted
4.5 Locate the same point in maps of different scale or projection

9. Plan-Following and Pattern-Recognition

The ability to follow non-verbal plans and use recursive patterns of various kinds is critical in a technological society. We believe there are a number of generalizable skills which will permit children to use plans and patterns effectively in a variety of substantive areas. These skills are closely related to some of the spatial skills and also to the use of examples in learning.

1.0 Direct copying.
  - 1.1 One-dimensional. E.g., given a string of beads, the child makes a string containing the same beads in the same order.
  - 1.2 Two-dimensional. E.g., given a parquetry block layout, the child constructs the same layout, using a second set of blocks; or given a matrix with various objects in the cells, the child copies the matrix, using a second set of materials.
  - 1.3 Three-dimensional. E.g., given a tinkertoy, or block, construction, child reproduces it, using a second set of materials.

2.0 Copying involving some "translation."
  - 2.1 Change of scale. E.g., given a small-scale picture of a tile design, child constructs the design using large tiles.
  - 2.2 Use of two-dimensional diagrams for constructing three-dimensional figures. E.g., given a picture of a three-dimensional construction, and the necessary materials, the child produces the appropriate construction.

3.0 Extending recursive patterns.
  - 3.1 Visual patterns in one, two and three-dimensions. E.g., given a string of beads, a matrix array or a three-dimensional construction that repeats itself in two or more sections, the child can add one more section that duplicates the pattern.
  - 3.2 Temporal patterns. E.g., given a recurrent pattern of flashing lights, child can predict which light will flash next.

Note: The patterns and constructions discussed here can be made up of discrete elements (e.g. beads, tiles, blocks) or continuous elements (e.g. line drawings, clay). To handle continuous constructions, the child must not only have the necessary motor control; he must also be capable of laying a grid over the model (either actually or in imagination) and then copying the squares in the grid.

10. Language Skills I. Functional Use of Language

The child must be able to use language for a number of different purposes. These purposes are listed here, while the specific linguistic content is considered in the next section.

1.0 Requesting and providing assistance. The child can ask for and respond to requests for:
  1.1 Objects
  1.2 Help in performing an action
  1.3 Simple information (e.g., "What is this?" "How many are there?" "When do we go out?")

2.0 Giving and following directions.

3.0 Describing objects and events. The child can:
  3.1 Name objects and identify objects named
  3.2 Identify and describe objects in terms of:
    3.2.1 physical characteristics
    3.2.2 function
    3.2.3 location
  3.3 Classify events and objects according to various criteria given orally
  3.4 Narrate real or fictional events, in sequence

4.0 Expressing and describing feelings and emotions.

5.0 Discussing past events and plan for future events.

6.0 Mediating his own problem-solving activity. The child can:
  6.1 Ask himself questions
  6.2 State rules to himself
  6.3 State a logical deduction to himself
  6.4 See Problem-Solving Skills (p.37)

7.0 Engaging in discussion. The child can:
  7.1 Persuade someone to do something
  7.2 Prove a point
  7.3 Request or provide examples
  7.4 Request and give clarification or definition
  7.5 Request and give reasons for a statement

11. Language Skills II. Linguistic Accuracy

In this section the specific linguistic content of the child's language is considered.

- 1.0 Phonology. The child can:
  - 1.1 produce the full range of English phonemes
  - 1.2 discriminate words that differ in a single phoneme
  - 1.3 echo words of various phonological characteristics

- 2.0 Vocabulary. The child can:
  - 2.1 name or identify a variety of
    - 2.1.1 objects or classes (nouns)
    - 2.1.2 actions (verbs)
    - 2.1.3 qualities (adjectives and adverbs)
  - 2.2 appropriately use and respond to relational terms, including
    - 2.2.1 time relation terms, mainly adverbs (e.g. so, before, after, during, etc.)
    - 2.2.2 space relation terms, mainly prepositions (e.g. up, down, inside, outside, left, right, etc.)
    - 2.2.3 logical relation terms (e.g. so, therefore, because, still, although, of, unless, both, either, not, etc.)
    - 2.2.4 tense aspects of verbs
    - 2.2.5 pronouns
    - 2.2.6 reflexives

- 3.0 The child can use and respond to:
  - 3.1 Basic sentence patterns including
    - 3.1.1 active
    - 3.1.2 passive
    - 3.1.3 negative
    - 3.1.4 interrogative
  - 3.2 Syntactic structures of increasing complexity. For example,
    - 3.2.1 Nominals
      - 3.2.1.1 Noun with preceding modifiers, usually adjectives (The two large red balls)
      - 3.2.1.2 Noun modified by prepositional phrase (the red ball in the box)
      - 3.2.1.3 Noun modified by relative clause (the children who visited yesterday)
      - 3.2.1.4 Noun modified by participal phrase (the birds sitting on the fence)
    - 3.2.2 Verbal constructions with various modifiers
    - 3.2.3 Participal phrases used in various ways
    - 3.2.4 Infinitive constructions
    - 3.2.5 Adverbials in various sentence positions

12. Memory Skills

Psychological studies of memory functions make it clear that there are certain behaviors that can increase the amount of material retained and the period of time during which it is retained.

1.0 Visual memory.
  1.1 Child is shown picture or object, which is then removed. He selects matching picture from an array.
  1.2 Child is shown an array of objects. While he isn't looking, one is removed. He states which object has been removed.
  1.3 Child copies 1, 2, or 3 dimensions in a situation in which he cannot view model and his own work at the same time.

2.0 Auditory memory.
  2.1 Child repeats a sequence of directions or events in a story.
  2.2 Child repeats a sequence of words or numbers.
  2.3 Child echoes a sentence accurately.
  2.4 Child reproduces a pitch or other sound after a delay.

3.0 Coding skills for increasing memory span.
  3.1 Given a number of objects to remember, the child groups them into categories, then recalls members of each category in sequence.
  3.2 Given an object to remember, child names it and uses the name as an aid in recall.
  3.3 Child learns or constructs a poem, rhyme, or other easily remembered mnemonic to aid in recall.

4.0 Strategies for memorizing.
  4.1 Backward chaining. If a verbal or other sequence is to be remembered in order, learn the last two or three items first, then the next-to-last plus the last, and so forth until the entire sequence has been memorized.
  4.2 Using rhythm and other aids. Recite material in a fixed rhythmic pattern, or set it to a tune, to increase the number of "cues" for recall.
  4.3 Grouping for efficient memorization.
    4.3.1 Separate material to be memorized into several related classes.
    4.3.2 Identify items most likely to become confused with one another and pay extra attention to those subsets in memorizing.

13. Problem-Solving Skills

Listed here are some of the skills useful in solving problems of various kinds. Systematic instruction in skills of this kind, together with extensive practice in solving real problems, should result in improved problem-solving performance by children.

1.0 Strategies for searching for an object in space. For example,
  1.1 searching an entire area systematically
  1.2 keeping track of areas already searched
  1.3 quick scanning over a general area
  1.4 reducing possibilities

2.0 Strategies for identifying an object in an array. For example,
  2.1 questioning to narrow possibilities
  2.2 ranking possibilities according to probability
  2.3 using "hints "

3.0 Strategies for finding materials. For example,
  3.1 sorting objects by possible function
  3.2 predicting possible difficulties in use of certain materials
  3.3 thinking of unusual uses of things

4.0 Strategies for information gathering. For example,
  4.1 formulating questions relevant to a problem
  4.2 asking appropriate people
  4.3 rejecting irrelevant information

5.0 Hypothesizing and predicting. For example,
  5.1 predicting probable outcomes
  5.2 stating what would be the case if X were true

6.0 Strategies for testing and verification. For example,
  6.1 trying out a given solution on original problems
  6.2 trying solution on a range of related problems

7.0 Strategies for analyzing problems. For example,
  7.1 finding similar problems and deciding whether solutions to those would work for new problems
  7.2 identifying elements of a problem and deciding which are solved and which need new solutions
  7.3 using analogies

8.0 Strategies for analyzing solutions. For example,
  8.1 generating several possible solutions
  8.2 ranking alternatives where no clear test of correctness of solution is available
  8.3 stating conditions under which a given solution could apply

14. Quantitative Skills

These are early mathematical skills exclusive of geometry and measurement, which appear separately.

1.0 Sets
- 1.1 Equivalence of sets. Given two sets of objects, the child can state whether the sets are of equal size.
- 1.2 Comparing and ordering sets.
  - 1.2.1 Given two unequal sets, the child can state which has more (less) objects.
  - 1.2.2 Given an array of sets of various sizes, the child can order them from smallest to largest, or vice versa.
- 1.3 The empty set. The child can identify the empty set as a set containing no objects.
- 1.4 Conservation of number. The child demonstrates that the number of objects in a set remains the same regardless of the spatial arrangement of the objects.
- 1.5 Union and partitioning of sets.
  - 1.5.1 Given a set, the child can partition it into two or more subsets and indicate the quantitative relations between the original set and the subsets.
  - 1.5.2 Given two or more sets, the child can combine them to form a larger set, and indicate the quantitative relations between the original sets and the combined set.
- 1.6 The rectangular array. Given a set of objects, the child can arrange them in a matrix format and demonstrate that the set is made up of n subsets of m objects.

2.0 Numbers and Numeration
- 2.1 Cardinal numbers. The child can state how many objects are in a set (including the empty set).
- 2.2 Ordinal numbers. Given an ordered set, the child can identify the 1st, 2nd, 3rd, etc. items.
- 2.3 Counting. The child can count to 10 and beyond by 1's, 2's, 3's, 5's, 10's, etc.
- 2.4 Numerals.
  - 2.4.1 The child can read and write one-digit and multi-digit numerals.
  - 2.4.2 The child can match numerals with sets of the appropriate number.
- 2.5 Base system.
  - 2.5.1 The child can interpret a 2 digit numeral as n tens plus n ones.
  - 2.5.2 Given a set of more than ten objects, the child can partition it into n subsets of 10 plus n subsets of 1.

Quantitative Skills-Continued

3.0 Operations of numbers
  3.1 The child can perform addition and subtraction as a form of
    3.1.1 union (or partioning) of sets
    3.1.2 successive movements along a number line
  3.2 The child can perform multiplication and division as a form of
    3.2.1 operation on a rectangular array
    3.2.2 successive addition or subtraction
  3.3 Word problems. The child can solve verbally stated problems involving addition, subtraction, multiplication and division.

4.0 Equations and the concept of the equal sign. Given a statement in equation form (but not necessarily involving numerical quantities) the child can perform various operations (adding, subtracting, rearranging, etc.) and still maintain the equivalence of the two sides of the equation.

5.0 Fractions of sets
  5.1 Given a set of objects, the child can divide it into halves, thirds, fourths, etc.
  5.2 The child can read fractional numerals and match fractional numerals with the appropriate subsets of a set.
  5.3 The child can order fractions from smallest to largest.
  5.4 The child can demonstrate the equality of certain fractional expressions (e.g., 2/6 = 1/3).

15. Geometric Skills

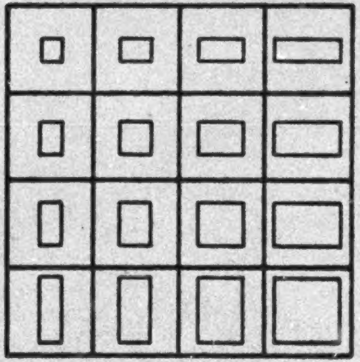
- 1.0 Shape recognition.
  - 1.1 Given an array of plane or solid geometric figures, child can name or identify all of the basic shapes.
  - 1.2 Child can identify straight and curved line segments.
  - 1.3 Child can identify open and closed curves.

- 2.0 Line relationships.
  - 2.1 Child can identify parallel, perpendicular and oblique lines.
  - 2.2 Child can identify right, acute and obtuse angles.

- 3.0 Construction and relationships of shapes.
  - 3.1 Given a set of plane geometric figures, child assembles them into a figure.
  - 3.2 The child cuts or draws lines to divide two-dimensional figure into other basic figures.
  - 3.3 The child can construct other basic figures (e.g., a cube, or other three-dimensional form) out of smaller forms.

- 4.0 Congruence of geometric forms.
  - 4.1 Child can superimpose one figure on another to determine whether they are the same size.
  - 4.2 Child can reconstruct one figure to permit direct comparison with another.
  - 4.3 Finally, child can use standard units to determine equality of area or volume (see measurement skills).

- 5.0 Seriation of forms in two (later, three) dimensions simultaneously. E.g., given an array of rectangles, child can construct a length-by-width matrix, as in the following diagram:



Geometric Skills _Continued

6.0 Conservation of area and volume. Given a wide, short, figure, child can determine whether it has the same area as a narrow, tall one. (Note: This assumes seriation in two or more dimensions and comparison of figures for equality.)

7.0 Fractions of wholes.
  7.1 Given a plane (later solid) geometric figure, the child identifies 1/2, 1/3, 1/4, etc. of it.
  7.2 Given a figure with some part shaded, the child states what fractional part has been identified.

8.0 Geometric visualization. E.g.,
  8.1 Child predicts (before trying) which geometric figures can be constructed from a set of parts.
  8.2 Child predicts which figures will exactly fit an outline drawing.
  8.3 Child predicts whether lines will touch when extended.
  8.4 Child can identify and construct symmetrical and asymmetrical designs.

16. Measurement Skills

These skills are intimately involved in both mathematics and science study, but are of sufficient general importance to warrant separate consideration.

1.0 Direct comparison. E.g., given two rods, child holds them together to decide whether they are equal or which is longer. Direct comparison can be performed in 1- 2- or 3-dimensions. Weight, temperature, duration, hue intensity, etc. can all be compared in addition to length, area and other spatial dimensions.

2.0 Mediated comparison. E.g., given two lines which the child must compare for length and which he cannot superimpose, child finds a rod exactly equal in length to one of the lines, then compares the rod with second line. Again, many qualities can be compared in this way.

3.0 Mediated comparison where only a part of the measuring stick is used. E.g., given two lines to compare, the child finds a rod longer than line A, makes a mark on the rod to indicate the length of A, then uses the marked rod for comparison with line B.

4.0 Mediated comparison using standard units. E.g., given two lines to compare, child uses a rod considerably shorter than line A and steps it along, counting the number of steps he makes. He then steps the same rod along line B, and compares the number of steps.

CURRICULUM SEQUENCE FOR NUMBER CONSERVATION

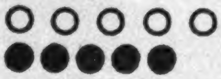
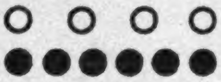
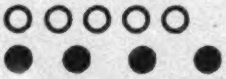
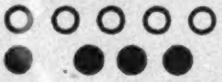
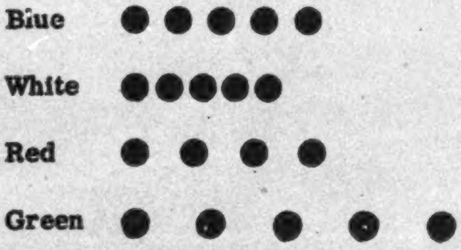
Terminal Objective

Given:	The child can:
Two equal sets of chips	State that the sets have the same number, regardless of how they are rearranged or how much space they take.

N.B. The sequence below contains the following subsets of objectives: a) establishing equality and inequality of sets by the "matching" or one-to-one correspondence method (nos. 1-5); b) demonstrating the retention of equality by showing that rearranged sets can be repaired (nos. 6-8); c) defining "more," "less," and "same" as, respectively, adding something, removing something, and neither adding nor removing, that is by the "conceptual" method (nos. 9-11); and d) several versions of the terminal behavior (nos. 12-14).

Teaching Sequence

Given:	The Child can:
1.0 Two sets of chips arranged in parrallel rows, and paired in the following types of arrangements:	
1.1 ○ ○ ○ ○ ○ ● ● ● ● ●	1.1 Say that both rows have the same number of chips.
1.2 ○ ○ ○ ○ ○ ● ● ● ●	1.2 Say that the top row has more chips.
1.3 ○ ○ ○ ● ● ● ● ●	1.3 Say that the bottom row has more chips.
2.0 Two sets of various kinds of objects, arranged as in 1.0.	2.0 Respond as in 1.0.
3.0 A set of chips (objects) arranged in a row, and a second set of chips (objects) arranged in a pile.	3.0 Pair one chip (object) from the second set with each chip (object) of the first set and state which set has more (or state that the two sets are equal).
4.0 Two piles of chips (objects).	4.0 Pair the chips, one from each set, in parallel rows and then state which set has more (or state that the two sets are equal).

Given:	**The child can:**
5.0 Given two beakers of the same size and shape and given an even number of beads (rods, cubes, etc.)	
	5.1 Establish equal sets by picking up two beads at a time, one in each hand, and placing one in each beaker.
	5.2 Then state that the two beakers have the same number of beads because "I counted them out," or "I put one in each", or "I made them equal" or equivalent reason.
6.0 Two equal sets of chips (objects) arranged in parallel rows and paired; and then given one of the sets re-arranged into a pile.	**6.0 Place the second set back into their original (paired) positions, and then state that the sets are still equal.**
7.0 Two sets of chips (objects) in the following kinds of arrangements:	**7.0 Pair the chips (objects) and state that:**
7.1 	**7.1 The sets have the same number.**
7.2 	**7.2 The bottom set has more.**
7.3 	**7.3 The top set has more.**
7.4 	**7.4 The top set has more.**
8.0 A row of blue chips and several rows of other chips, arranged as follows:	
	**8.1 Pair each other set with the blue, if necessary, and** **8.2 State that the white and green rows have the same number of chips as the blue.**

Given:	The child can:
9.0 A set of chips, arranged in a row, to which teacher:	
9.1 adds a chip, with child watching	9.1 State that there are now more chips.
9.2 removes a chip, with child watching	9.2 State that there are now fewer (less) chips.
9.3 neither adds nor removes a chip.	9.3 State that there are the same number of chips as before.
10.0 A set of chips in a pile, to which teacher:	10.0 Respond as in 9.0
10.1 adds a chip, with child watching	
10.2 removes a chip, with child watching	
10.3 neither adds nor removes a chip.	
11.0 A set of objects arranged in a row, teacher rearranges into a pile (or circle), with child watching, and	11.0 Respond as in 9.0
11.1 adds an object	
11.2 removes an object	
11.3 neither adds nor removes an object.	
12.0 An equal number of eggcups and eggs (or cups and saucers, red and blue chips)	
12.1 arranged so that the eggs and eggcups are paired	12.1 State that there are the same number of eggs and eggcups.
12.2 the eggs then bunched in a pile	12.2 State that there are the same number without re-pairing because "none wer added or taken away," "I could put them back in the eggcups," or equivale reason.

THE FLORIDA PARENT EDUCATION MODEL

Supplementary Materials

Selected Categories From a Taxomony of Piagetian-Type Mental Operations, reprinted from D. Mork & J. Shea, "The Cooperative Development of Learning Tasks in the Florida Parent Education Follow Through Model" in Research Reports, (Gainesville, Fla.: University of Florida, 1969), p. 113.

Suggestions for the Local Development of Learning Tasks, reprinted from Mork & Shea, Research Reports, (Gainsville, Fla.: University of Florida, 1969) p. 115.

A Sample Task, reprinted from Mork & Shea, Research Reports, (Gainesville, Fla.: University of Florida, 1969), p. 116.

Descriptions of Data Collection Instruments Used in Florida Parent Education Model, reprinted from W. F. Breivogel, "The Adaptation and Extension of an Infant Education Model to Selected 'Follow Through' Projects" in Research Reports, (Gainesville, Florida: University of Florida, 1969), pp. 62-64.

(continued on page 132)

FLORIDA PARENT EDUCATION MODEL SUPPLEMENTARY MATERIALS (Continued)

Parent Education Weekly Report: Task Assessment Items, reprinted from Mork & Shea, Research Reports, (Gainesville, Fla.: University of Florida, 1969), p. 118.

SELECTED CATEGORIES FROM A TAXONOMY OF PIAGETIAN-TYPE MENTAL OPERATIONS

Discrimination

- Audio
- Visual
- Tactile
- Smell
- Taste

Temporal Reasoning

- Before
- Now
- After
- Tomorrow
- Later

Seriation

- Size
- Weight
- Shade
- Texture
- Color

Spacial Reasoning

- Under
- Over
- Here
- There
- On

Conservation

- Number
- Weight
- Continuous matter
- Discontinuous matter
- Time

Grouping

- Color
- Shape
- Material
- Texture
- Size

SUGGESTIONS FOR THE LOCAL DEVELOPMENT OF LEARNING TASKS

1. Good Piagetian tasks should develop mental operations (mental processes or "ways of knowing").

2. The task should promote a notion of logical thought sequence for the child. The elements of the sequence for one child are not necessarily the same as for another child or for an adult.

3. Good tasks should provide for the continuous mental involvement of each participating child. An occasional "tune-in" and "tune-out" disrupts the logical progression and greatly diminishes the value of the task.

4. Tasks in general should be "open-ended" (no specific culmination is anticipated at the completion of each task. The task should rather serve as a "springboard" for further individual exploration.)

5. The use of proper labels (names of objects, people, quantities, colors, etc.) is secondary to the thought processes which these labels tend to facilitate. Let the need for labels precede their designation. If the task causes a child to discriminate between colors, shapes, quantities, etc., it can be assumed that he then has a need for a label and the vocabulary of labels can be injected into the task.

6. Lower level tasks should, whenever possible, enable the child to manipulate real materials such as rocks, leaves, crayons, fruits, vegetables, bottle caps, spools, etc.

7. Tasks should be prepared and utilized which develop mental processes that have practical value in the child's life.

8. Task activities should be informal, flexible, logical and spontaneous rather than rigid recipe-book type procedures.

9. Piagetian tasks should permeate the educational program. It is hoped that their usage will result in a way of teaching which will be in evidence throughout the educational program.

10. The element of surprise should be built into each task. Even a surprise failure may prompt a child to pursue a thought process with increased vigor. Activities should also be intriguing to the child and should capitalize on the kind of events which excite children at this age.

11. Verbal and non-verbal interaction should be encouraged among children in a group as well as between children and adult leaders.

12. Whenever possible present higher order questions which require the child to anticipate, summarize, generalize, interpret, analyze, discriminate etc.

A SAMPLE TASK

"BLIND DETECTIVE"

Aim: To learn to recognize shapes of objects from touch and to transfer this knowledge to verbal and pictoral descriptions.

Materials: A paste board box and an assortment of blocks, balls and other small objects. Cut two holes on opposite sides of the box large enough for child's hands and forearms to enter, and near enough to the bottom of the box that he may handle objects that are placed on the bottom. Place objects in the box for children to handle without seeing. The younger the child the simpler and more familiar the objects. For older children use complex shapes and less familiar objects.

Action: Place objects in the box and have the child come to the box and put his hands through the holes to handle one object. Encourage them to turn the object over in their hands and feel all surfaces and angles. The teacher can observe by looking into the top of the box. Ask the child to describe the object. Then ask him to draw it. After he has done this, place the object in his view and let him describe and draw it.

Adaptations: When two different objects are used, the child could describe how the objects differ or are alike.

The format of learning activities used in the layout of the task components - aim, materials, action, adaptations - is an outgrowth of organizational pattern employed by Gordon and Lally (1967) and Wagner, et. al. (1967) in their books of learning activities.

Descriptions of Data Collection Instruments
Used in the Florida Parent Education Model

Parent Educator's Weekly Report (PEWR)

The Parent Educator's Weekly Report was developed in the Early Child Stimulation Through Parent Education Project. The PEWR went through a number of revisions during the ECSTPEP and was adapted for the Florida Follow Through Model.

How I See Myself Scale (HISM)

The How I See Myself Scale is an instrument constructed by Gordon (Gordon, 1968). It is a pencil-paper self-reporting device which is administered to the mother. It yields factor scores on attitudes toward teachers and school, interpersonal adequacy, autonomy and physical appearance. The mother's version of the scale is an adaptation of the original designed for children and youth.

The Social Reaction Inventory (SRI)

The Social Reaction Inventory was developed by Mr. Larry Bilker as a modification of the Rotter (1936) I--E Scale. The first step in the modification was changing the language to a fourth grade vocabulary level. The other steps were clarifying terms with the parent educators, reworking language structure, and testing whether mothers would be willing and able to understand and respond to such an instrument.

Children's Self-Social Construct Test (CSSCT)

The Children's Self-Social Construct Test is a paper and pencil, nonverbal instrument providing measures of (a) self esteem, (b) social dependency, (c) identification with and preference for mother, father, teacher, and friend, (d) realism as to size, and (e) minority identification. The test is administered individually; all directions are oral and all responses nonverbal. The child selects a symbol (circle) to represent the self from among those presented to him, or pastes a gummed circle (representing the self) on the page in relation to symbols representing others. It is assumed that the child can express his self-social concepts symbolically, using common symbolic meanings. (Long, Henderson and Ziller, 1967)

Florida Affective Categories (FLAC)

The Florida Affective Categories is an instrument used in the classroom to look at the affective verbal and non-verbal behaviors of teachers and children. The instrument is a modification of the South Carolina Observation Record (SCOR) developed by Robert Soar (1966). The original instrument (SCOR) drew heavily on the Hostility-Affection Schedule (Fowler, 1962) and the earlier versions of the Observation Schedule and Record (Medley and Mitzel, 1958). The present version includes behavior specific to primary age children.

Teacher Practices Observation Record (TPOR)

The Teacher Practices Observation Record (Brown, 1968) is an instrument used to measure a teacher's practices in relationship to John Dewey's Experimentalism. The instrument consists of sixty-two sign items of teacher behavior.

Reciprocal Category System (RCS)

The Reciprocal Category System is a modification of the Flanders System (Flanders, 1965) by Ober, Wood, and Roberts (Ober, 1968). The system records the verbal behavior of both teachers and pupils in the classroom.

Purdue Teacher Opinionnaire

The Purdue Teacher Opinionnaire scale is designed to measure teacher morale. It yields a total score indicating the general level of a teacher's morale, and also provides meaningful factors or subscores which break down morale into some of its dimensions.

Home Interview Schedule (Environmental Press Characteristics Questionnaire

The Home Interview Schedule is, as the name implies, a questionnaire given to parents in the home by the parent educator. It was developed by Wolf (1964) and adapted for the Florida Follow Through project by Malcolm Garber of the University of Florida. The Schedule measures three things: 1) environmental press for achievement; 2) press for language development, and 3) availability of learning situations inside and outside of the child's home.

Parent Educator Weekly Report Task Assessment Items

Col. 36 and 37. Which main task was presented today? Place the task number in Col. 36 and 37. If task number was only one digit, precede it with a zero. Example: If you present task 6, mark 06 in Cols. 36 and 37.

Col. 38. How did the mothering one react to your instructions for main task?

1. Looked at you while you were talking. Asked questions, was attentive.
2. Did other things while you were showing her how to do the task (ex: straightening child's clothes, looked around the room, did housework), listens passively.
3. Walked out of the room while you were explaining things to her.
4. Refused to do task
5. Laughed at and/or scoffed at instructions
6. Other ________________________________

Col. 39. Mothering one's ability to repeat main task

1. could repeat task you had explained to her
2. could do part of the task by herself but needed the trainer's help
3. couldn't repeat task you had explained to her

Col. 40 and 41. Which main task was presented during last visit? Place the task number in Cols. 40 and 41. If the task number has only one digit, precede it with a zero. Ex: If last task was No. 5, mark 05 in Cols. 40 and 41.

Col. 42. Mothering one feels that child's response to last task was

1. child was highly interested in it and successful
2. child was highly interested in it but could not handle materials
3. child was mildly interested in it and successful
4. child was mildly interested in it but could not handle materials
5. child showed little interest but could handle the materials when urged to
6. child showed little interest and was not able to handle materials

Col. 43. When the mothering one goes over last week's task with her child she

1. doesn't know what she is doing
2. knows what she is doing
3. information not available

Col. 44. When the mothering one goes over last week's task with her child, she

1. gets discouraged if child doesn't do task the first time
2. satisfied even if child doesn't do well
3. tries again even if child doesn't do well the first time
4. tries until child can do it or child gives up
5. continues task even after child does well
6. she did not go over last week's task